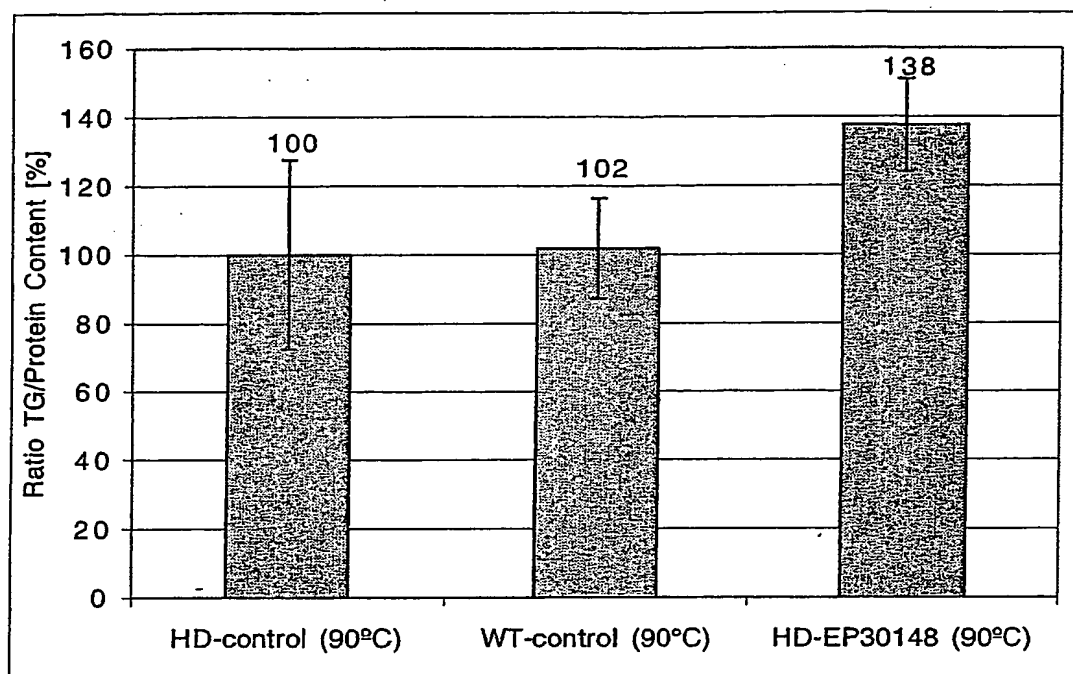


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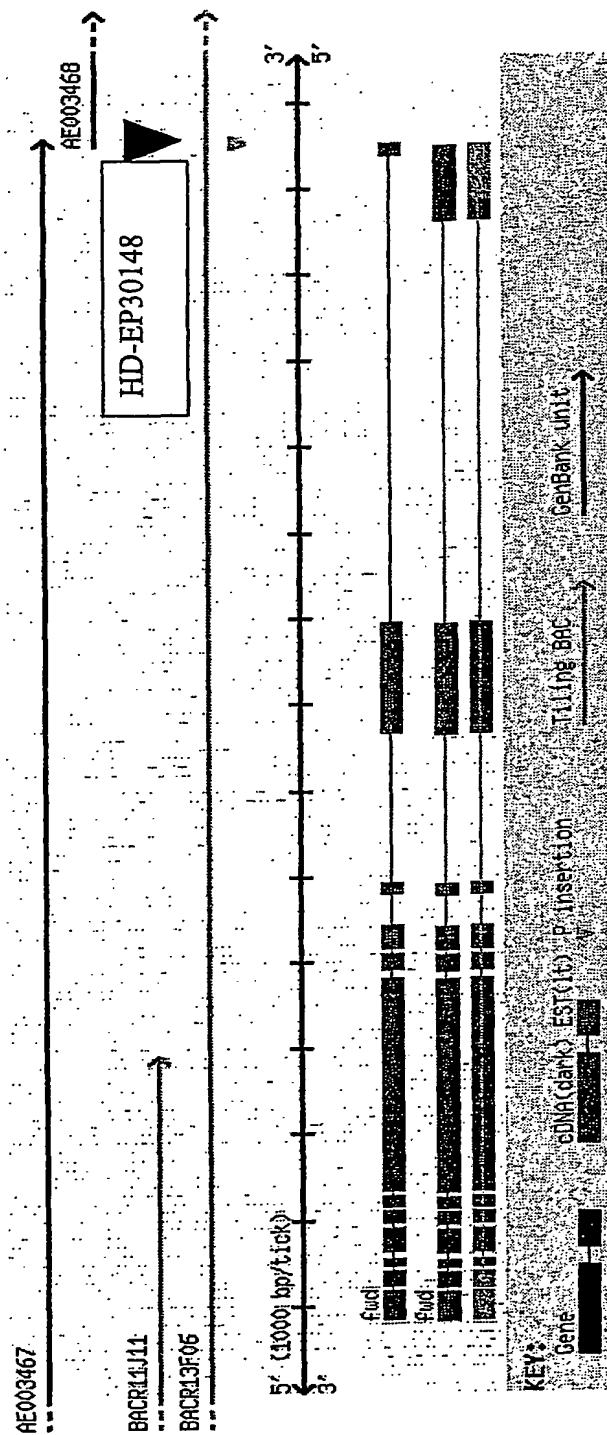
Figure 1. Energy storage triglyceride content of a *Drosophila fvd* (Gadfly Accession Number CG7004) mutant



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Figure 2. Molecular organization of the *fwd* gene (GadFly Accession Number CG7004)



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Figure 3. Expression of the *fwf* (GadFly Accession Number CG7004) Homolog in Mammalian Tissues

Figure 3A. Real-time PCR analysis of the catalytic beta polypeptide of phosphatidylinositol 4-kinase (*Pik4cb*) in wild type mouse tissues

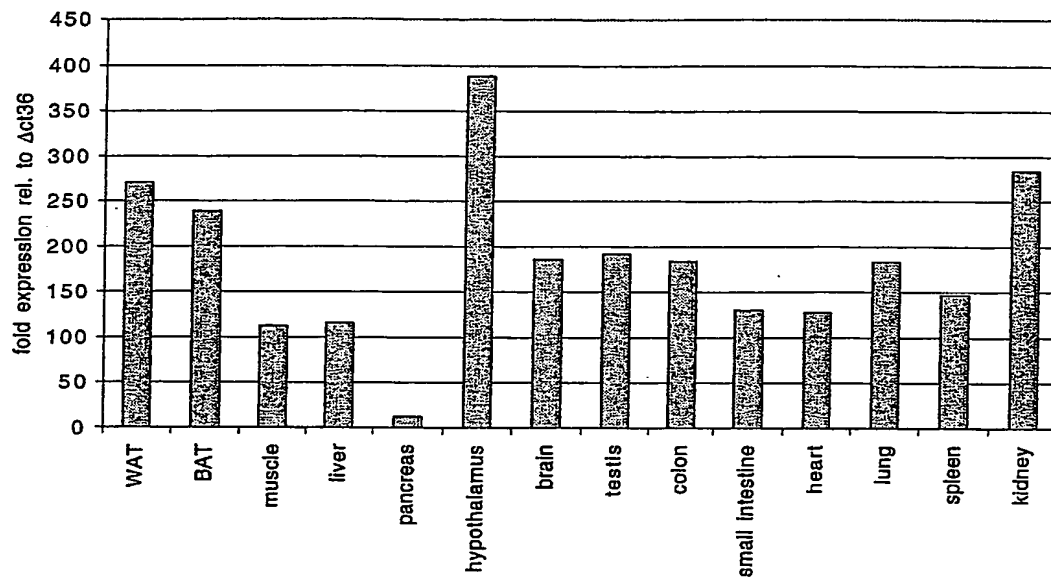
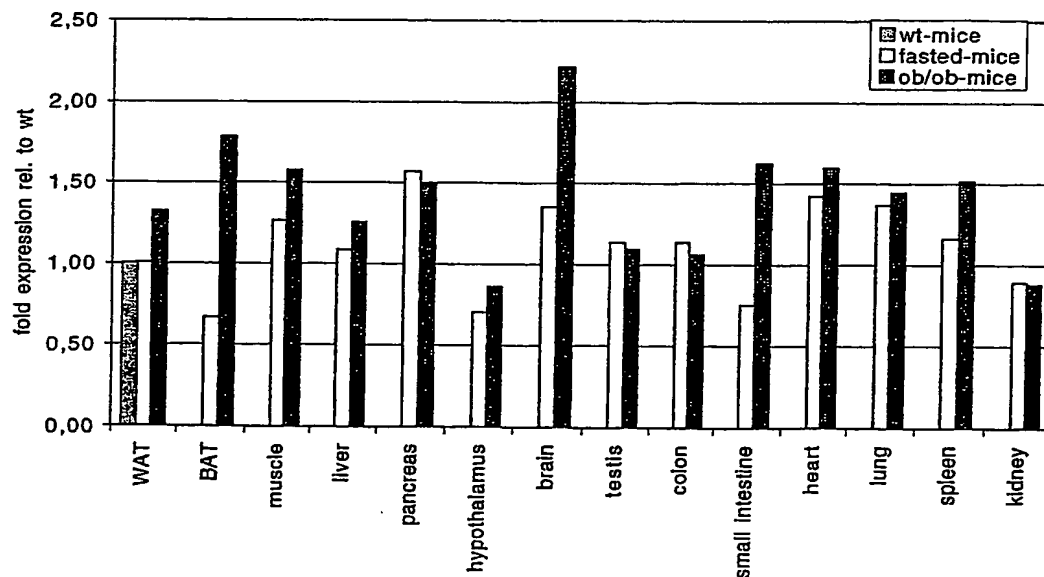


Figure 3B. Real-time PCR analysis of *Pik4cb* expression in different mouse models



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Figure 3C. Real-time PCR analysis of *Pik4cb* expression in mice fed with a high fat diet compared to mice fed with a control diet

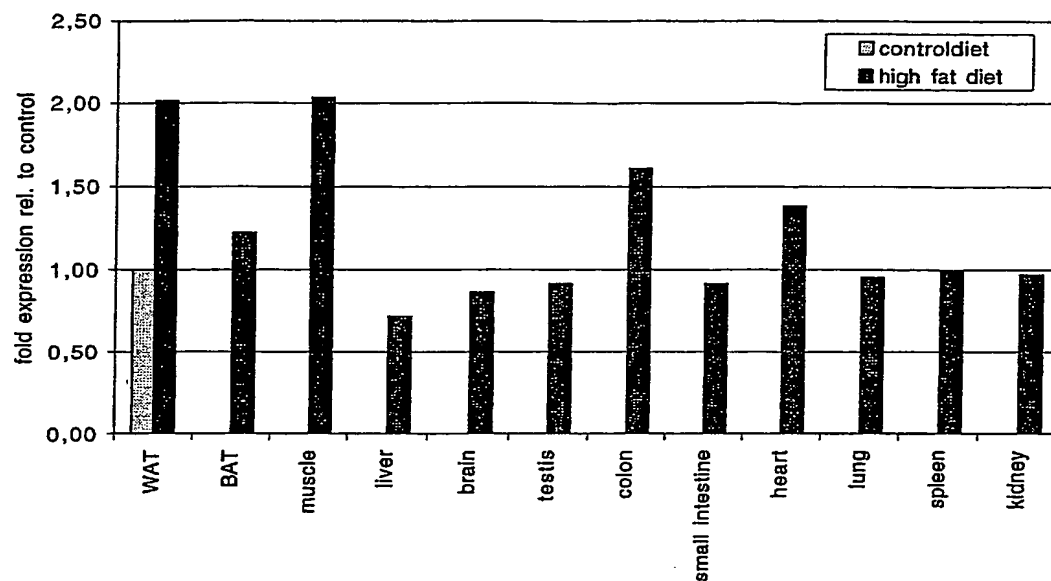
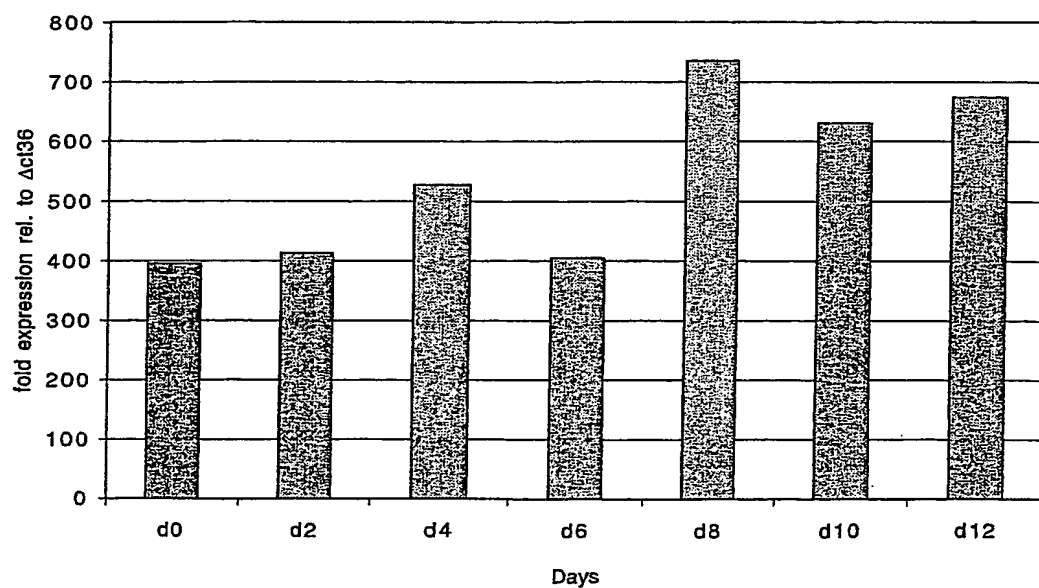


Figure 3D. Real-time PCR analysis of *Pik4cb* expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes



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Figure 4. Expression of the human *fwd* homolog in mammalian (human) tissue.

Figure 4A. Microarray analysis of phosphatidylinositol 4-kinase, catalytic, beta polypeptide (PIK4CB) expression in human abdominal derived primary adipocyte cells during the differentiation from preadipocytes to mature adipocytes

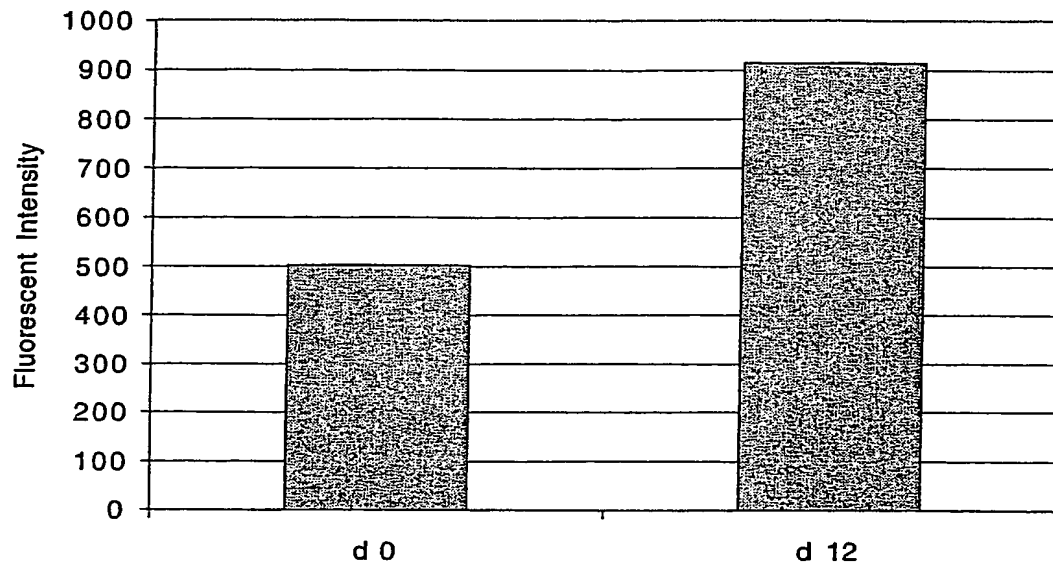
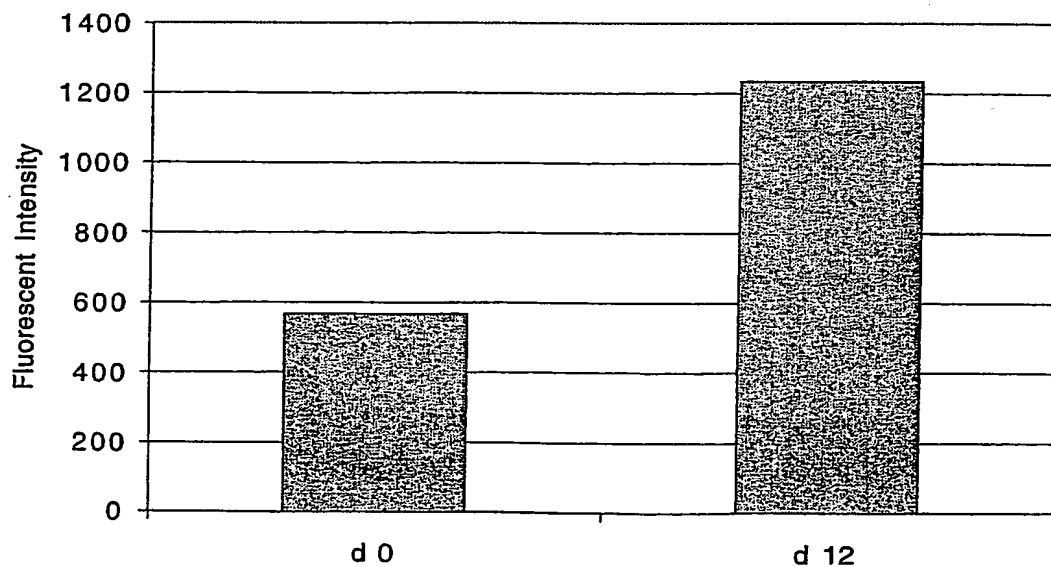
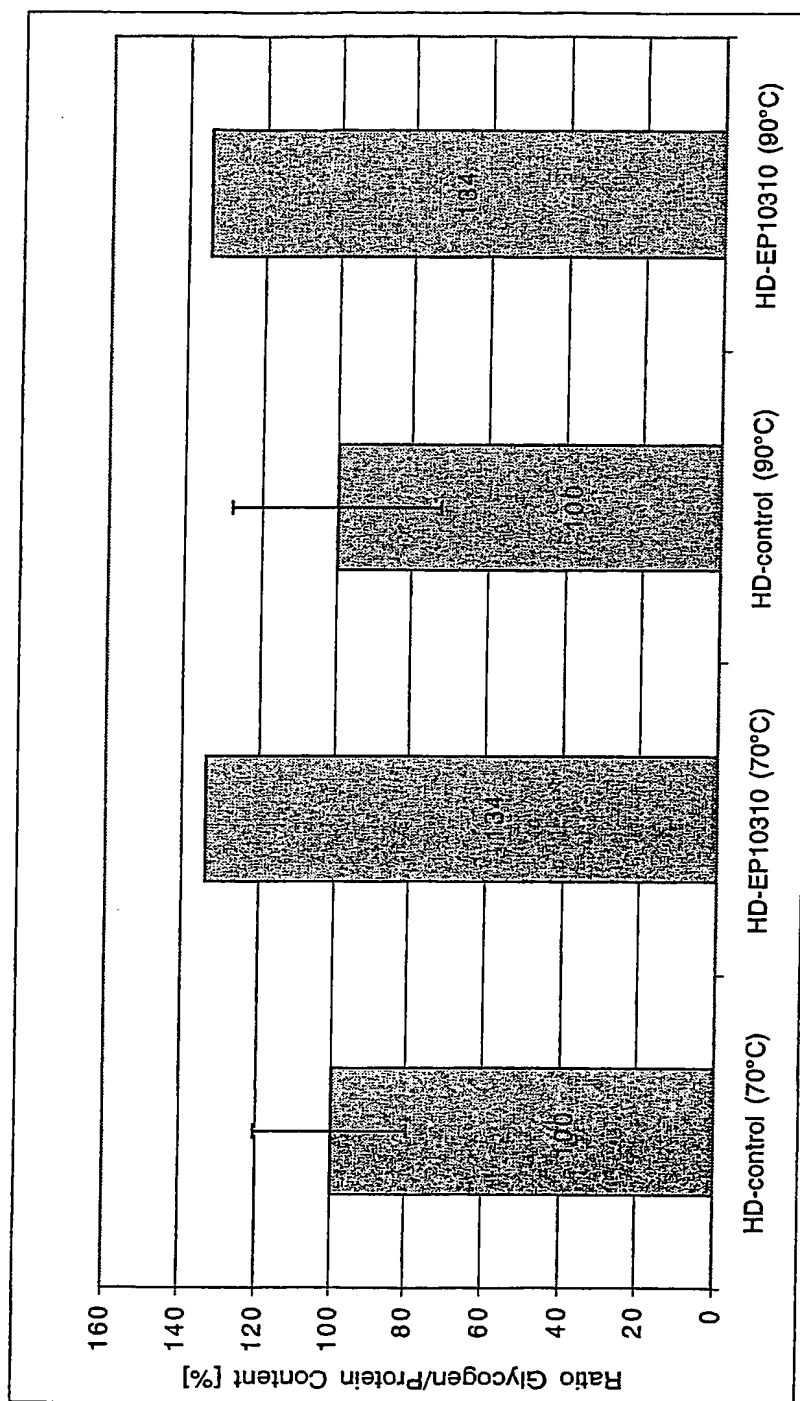


Figure 4B. Microarray analysis of PIK4CB expression in a human adipocyte cell line during the differentiation from preadipocytes to mature adipocytes



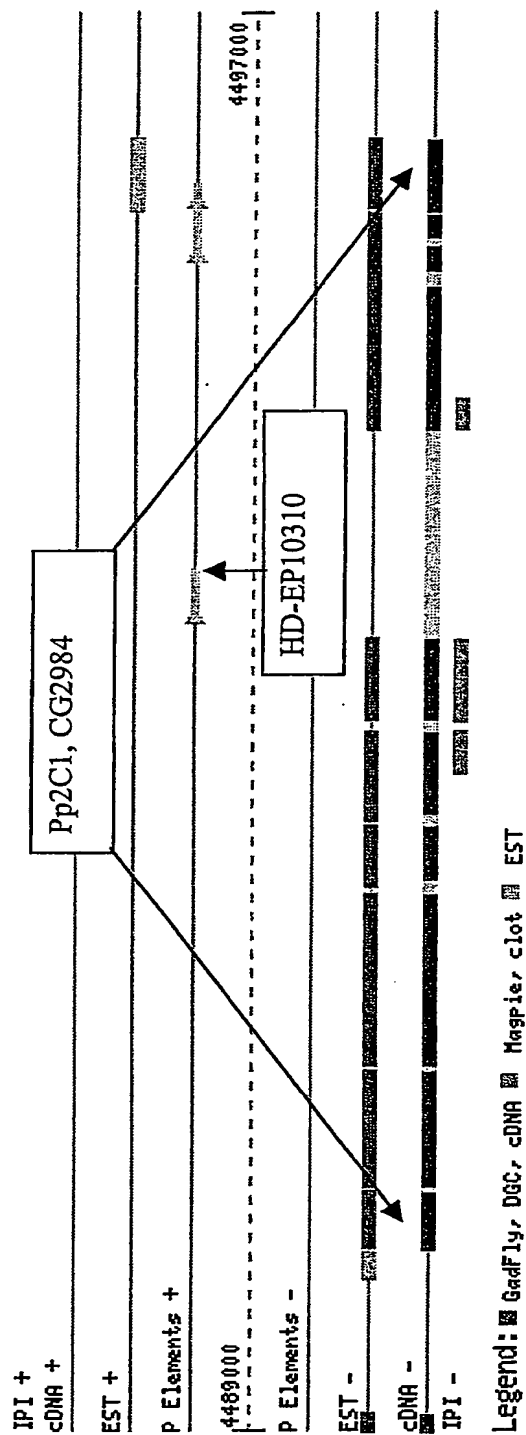
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Figure 5. Glycogen content of a *Drosophila* protein phosphatase 2C (*Pp2C1*; GadFly Accession Number CG2984) mutant



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Figure 6. Molecular organization of the *Pp2C1* gene (GadFly Accession Number CG2984)



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Figure 7. Expression of the *Pp2C1* (GadFly Accession Number CG2984) Homolog in Mammalian Tissues

Figure 7A. Real-time PCR analysis of protein phosphatase 1D magnesium-dependent, delta isoform (*Ppm1d*) in wild type mouse tissues

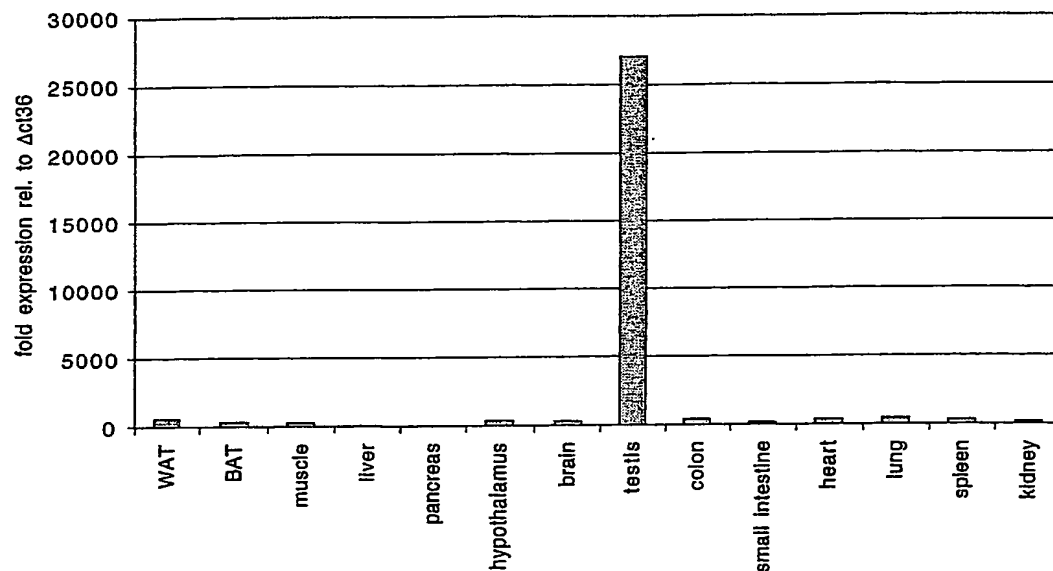
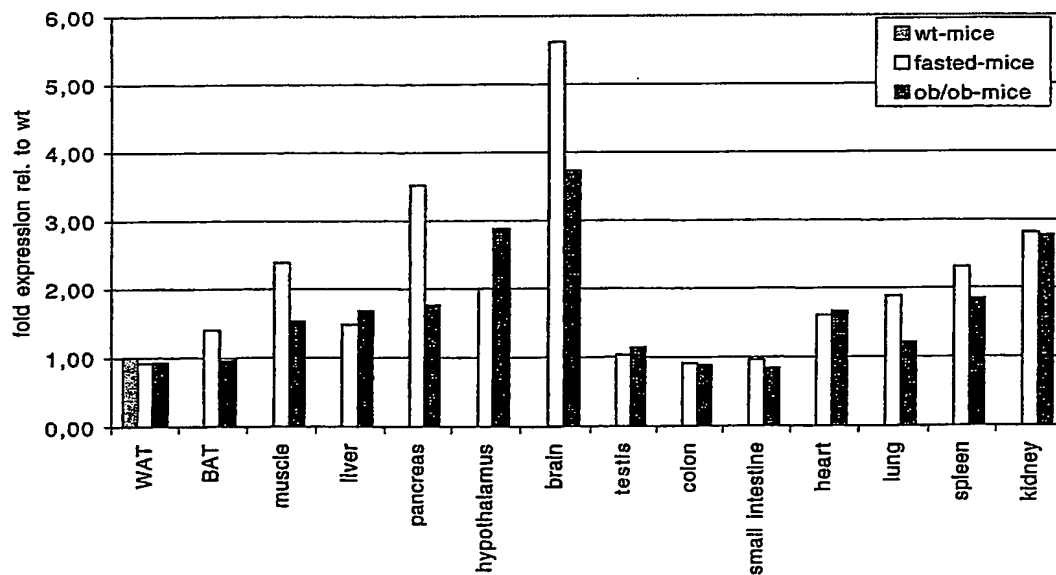


Figure 7B. Real-time PCR analysis of *Ppm1d* expression in different mouse models



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Figure 7C. Real-time PCR analysis of Ppm1d expression in mice fed with a high fat diet compared to mice fed with a control diet

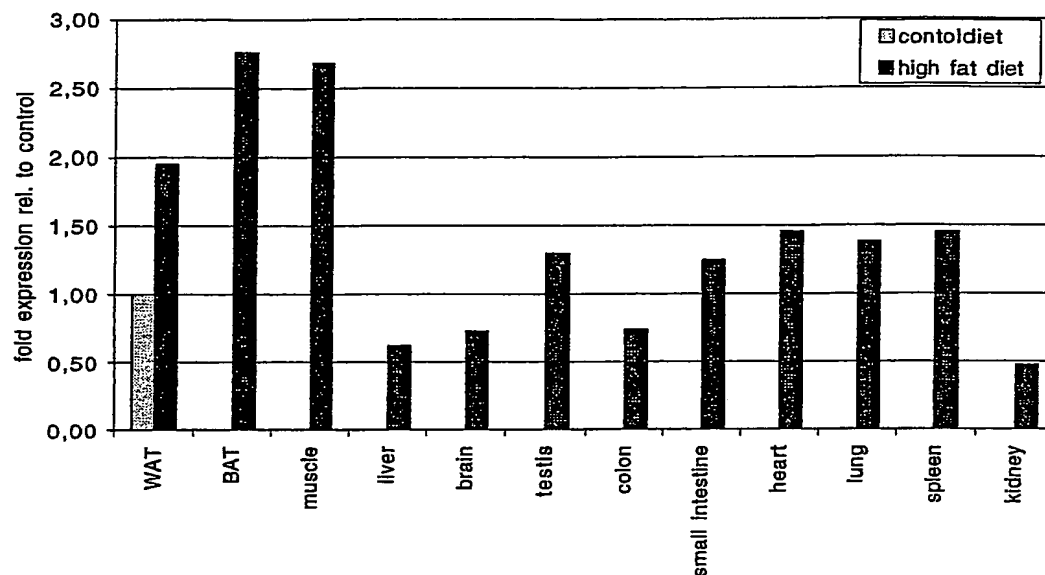
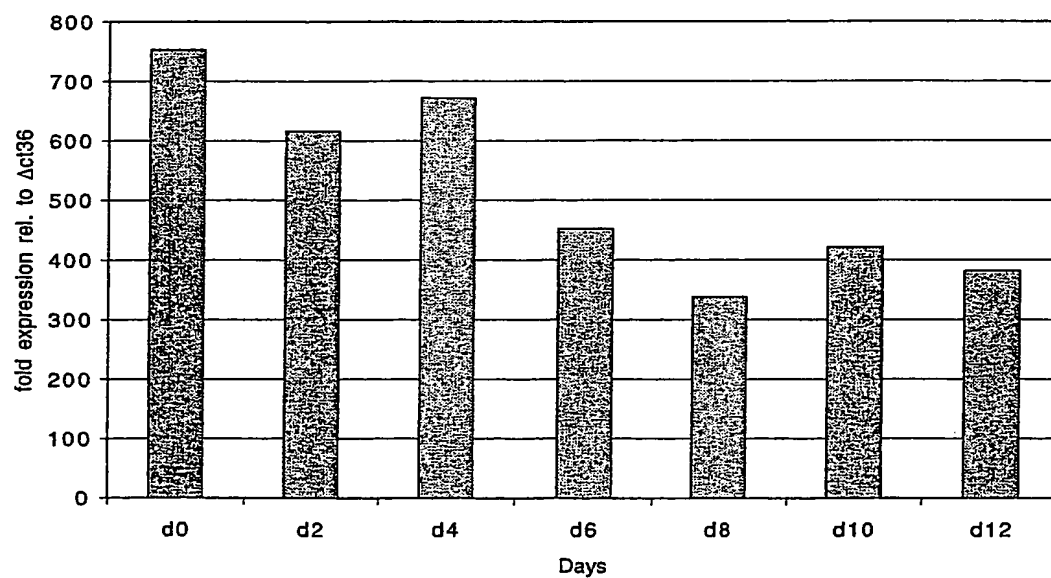
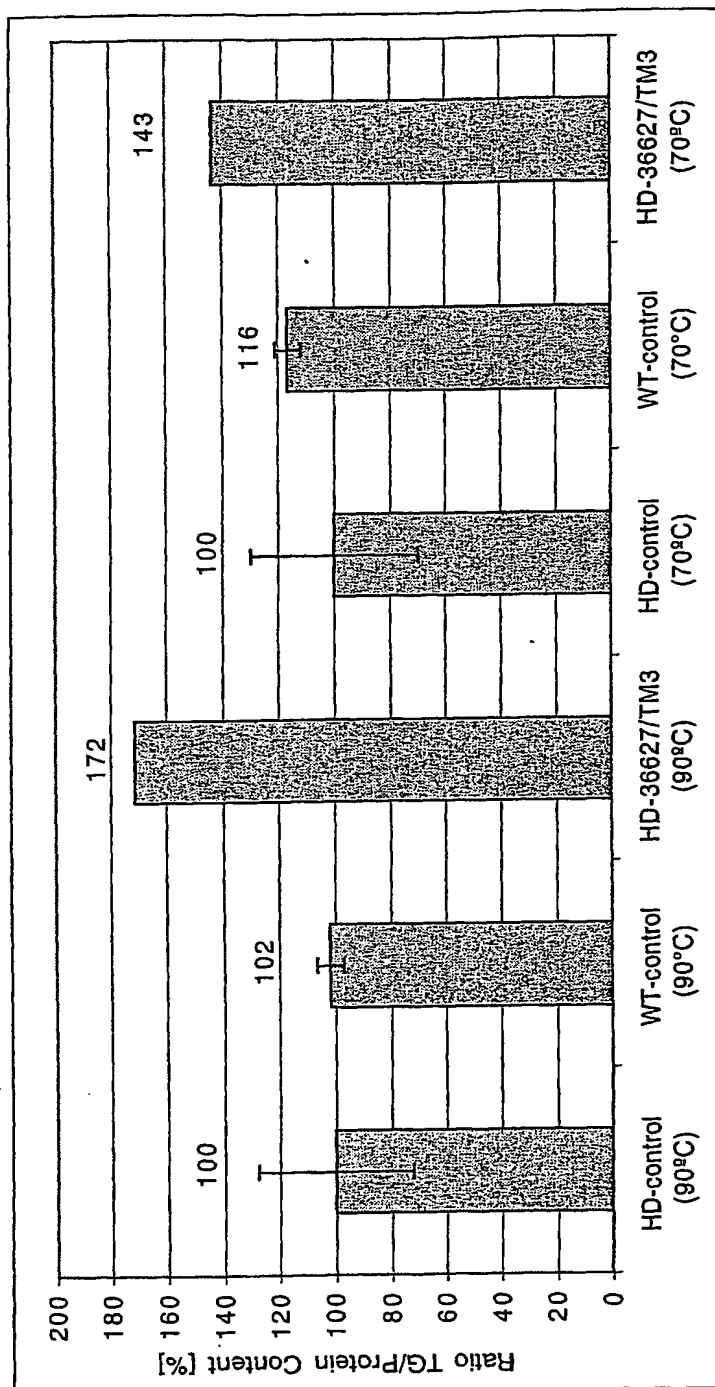


Figure 7D. Real-time PCR analysis of Ppm1d expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes



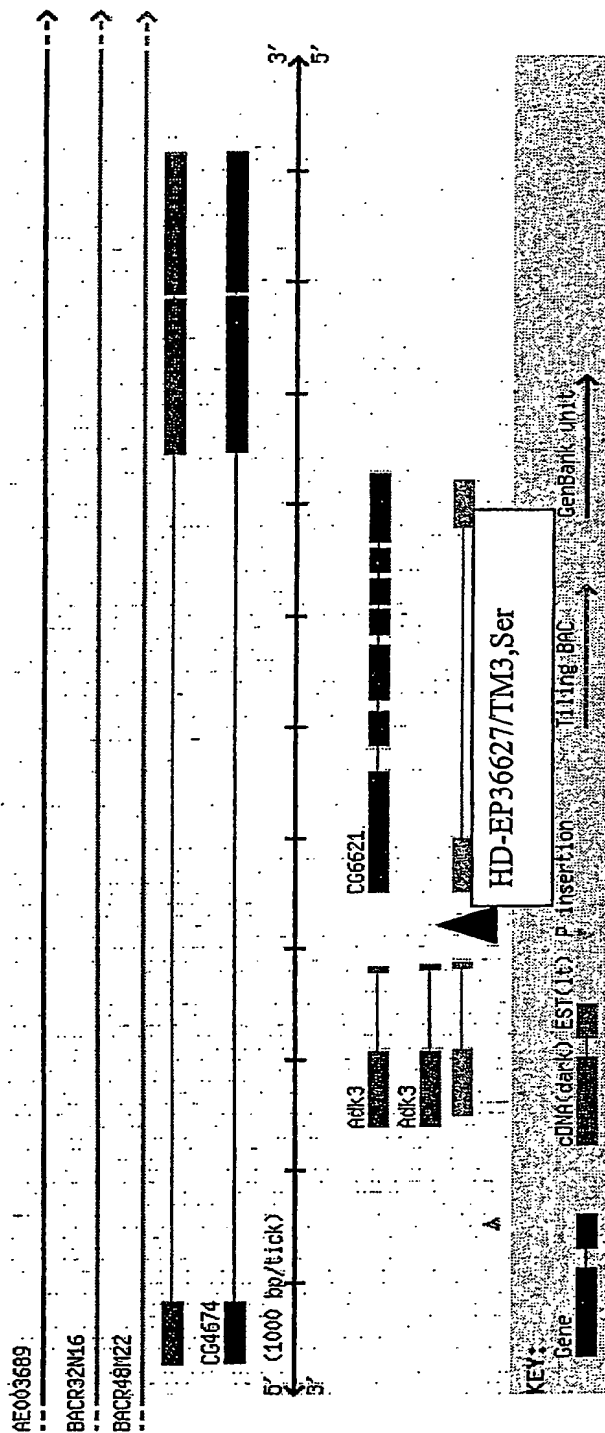
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Figure 8. Energy storage triglyceride content of a *Drosophila Adk3* mutant (Gadfly Acc. No. CG6612)



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Figure 9. Molecular organization of the *Adk3* gene (GadFly Accession Number CG6612)



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Figure 10. Expression of *Adk3* (GadFly Accession Number CG6612) Homologs in Mammalian Tissues

Figure 10A. Real-time PCR analysis of adenylate kinase 3 alpha like (*Akl3l*) in wild type and control-diet mouse tissues

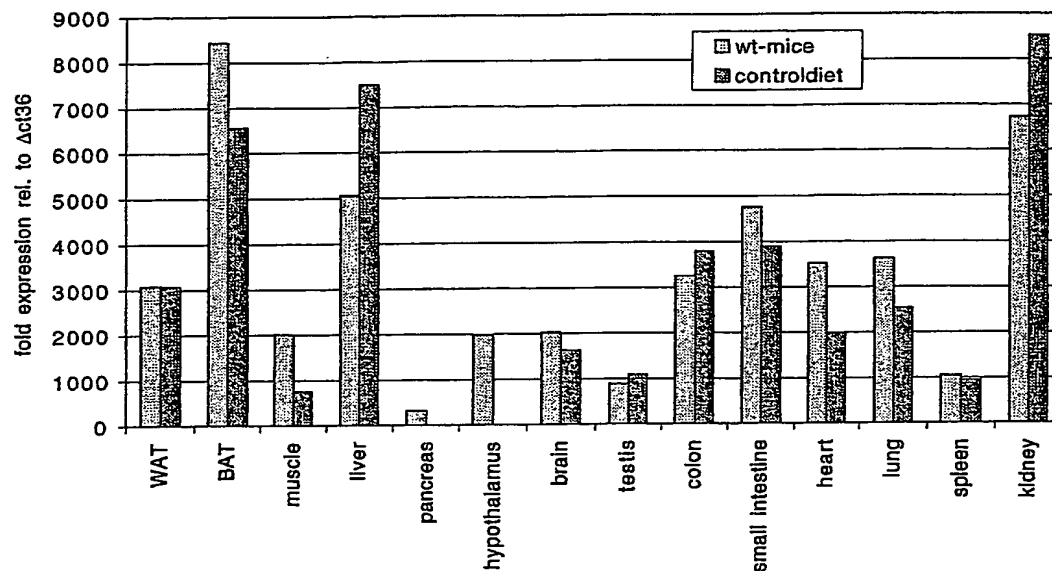
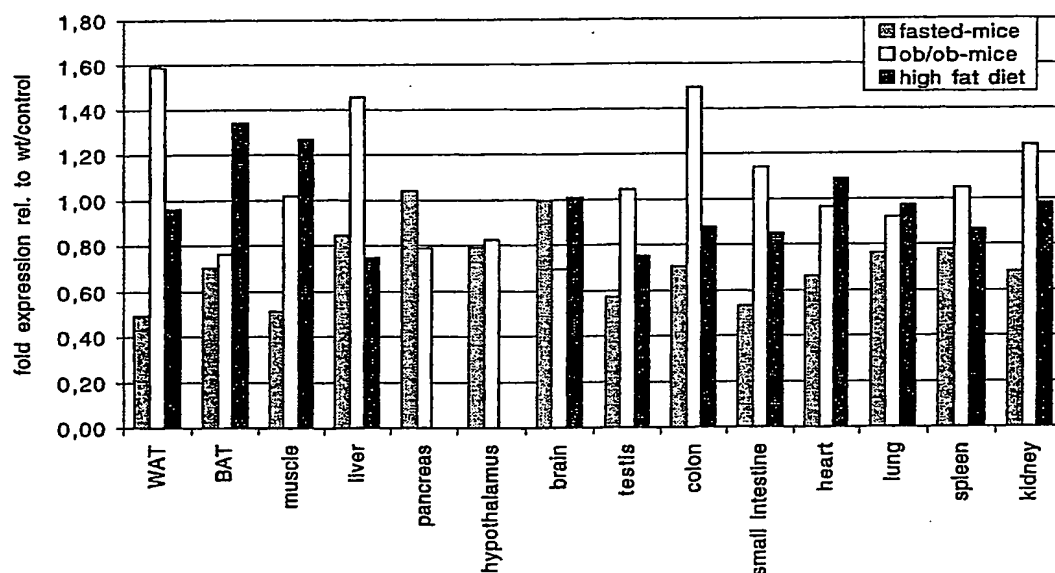


Figure 10B. Real-time PCR analysis of *Akl3l* expression in different mouse models and in mice fed with a high fat diet compared to mice fed with a control diet



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Figure 10C. Real-time PCR analysis of Ak13l expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes

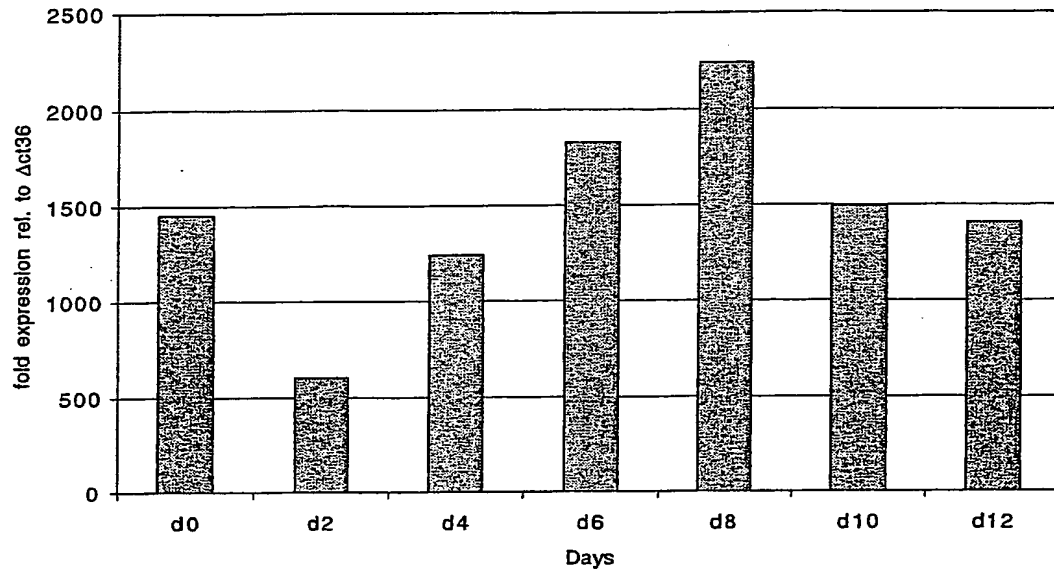
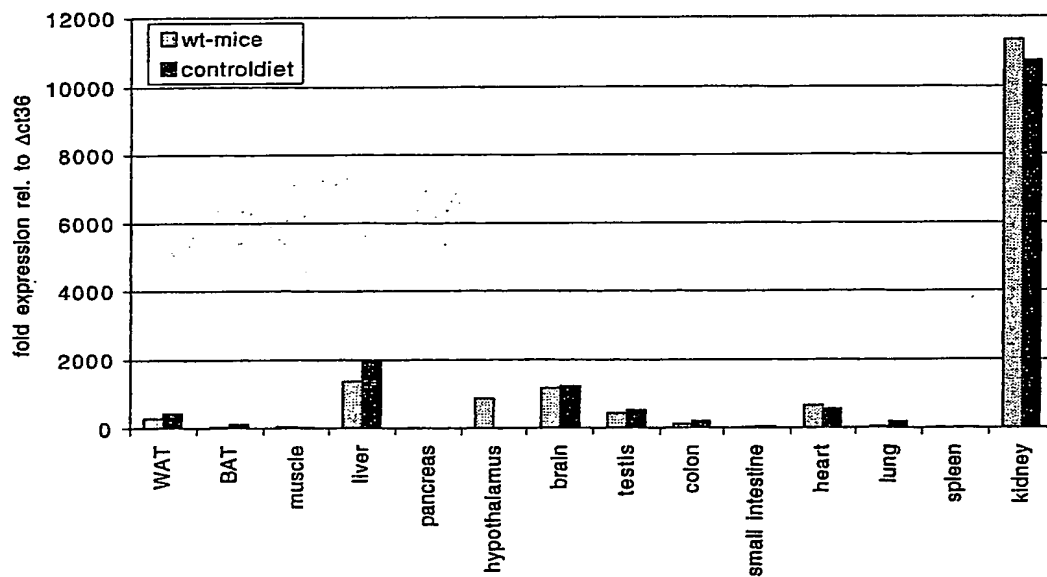


Figure 10D. Real-time PCR analysis of adenylate kinase 4 (Ak4) in wild type and control-diet mouse tissues



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Figure 10E. Real-time PCR analysis of Ak4 expression in different mouse models and in mice fed with a high fat diet compared to mice fed with a control diet

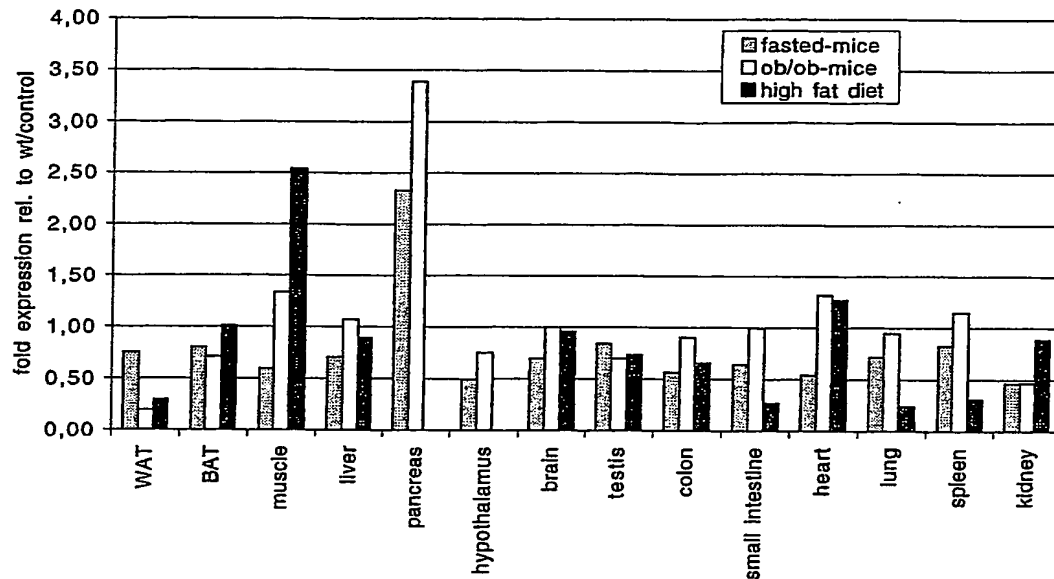
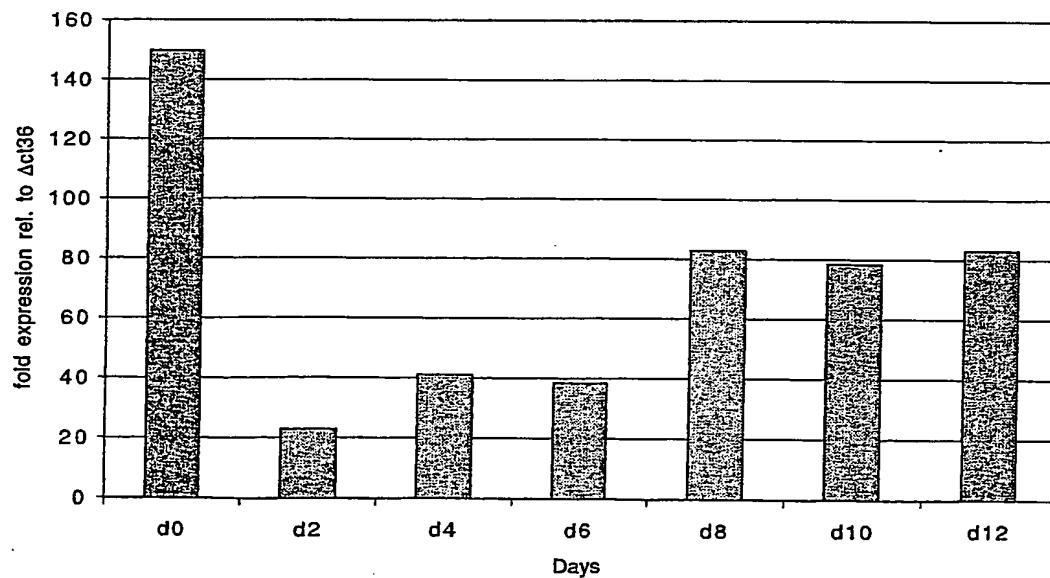


Figure 10F. Real-time PCR analysis of Ak4 expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes



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Figure 11. Expression of human *Adk3* homologs in mammalian (human) tissue.

Figure 11A. Microarray analysis of adenylate kinase 3 like 1 (AK3L1) expression in human abdominal derived primary adipocyte cells during the differentiation from preadipocytes to mature adipocytes

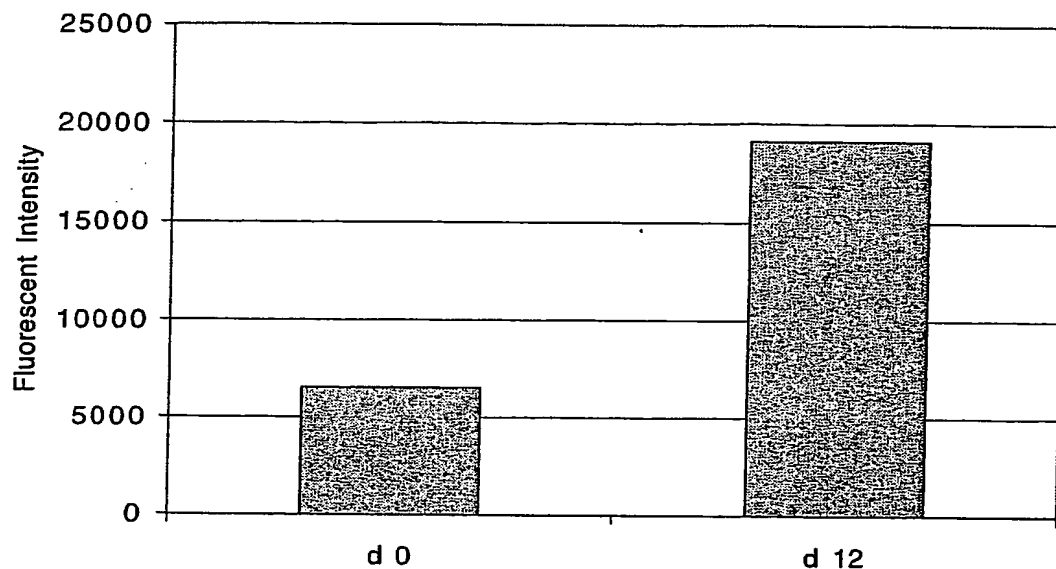
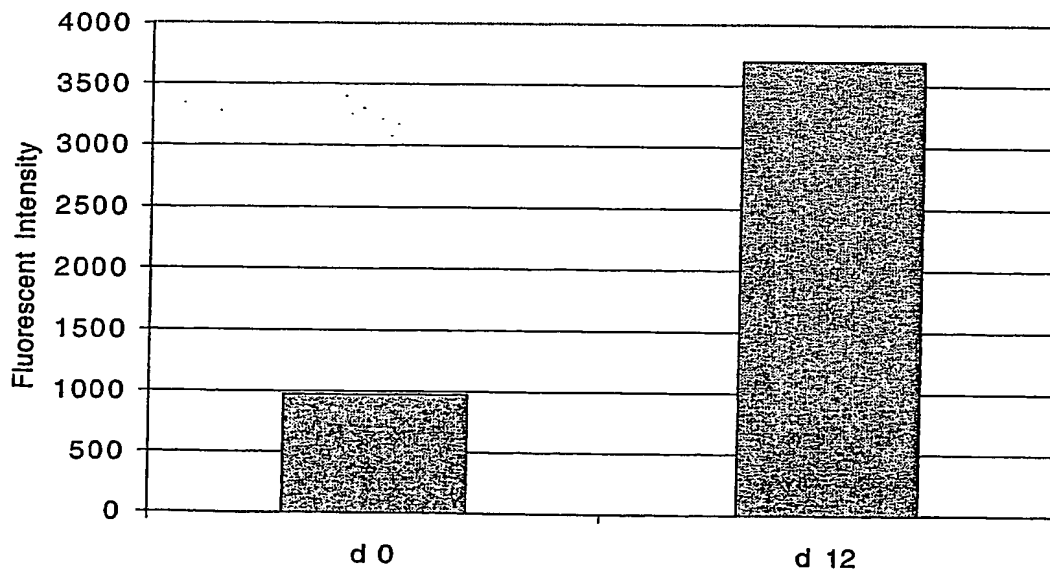
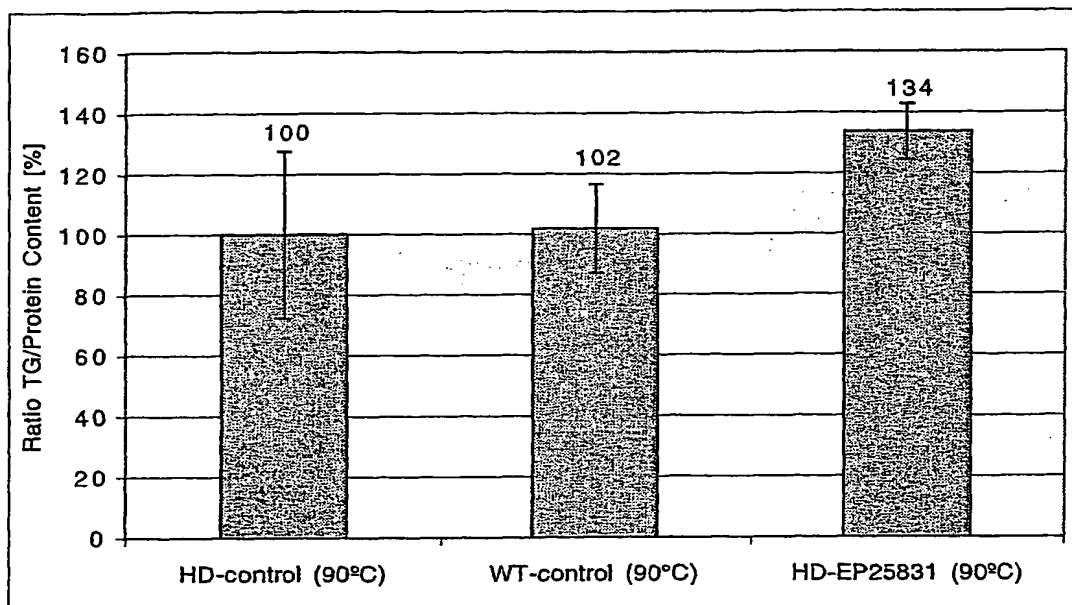


Figure 11B. Microarray analysis of adenylate kinase 3 (AK3) expression a human adipocyte cell line during the differentiation from preadipocytes to mature adipocytes



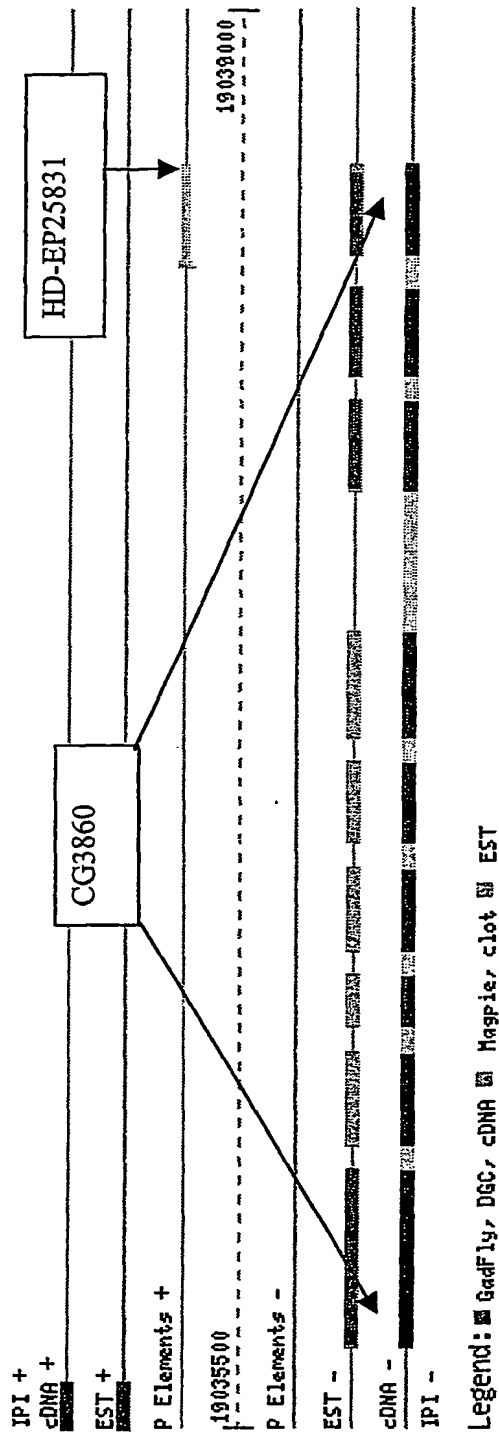
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Figure 12. Energy storage triglyceride content of a *Drosophila* CG3860 (Gadfly Accession Number) mutant



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Figure 13. Molecular organization of the CG3860 gene (GadFly Accession Number)



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Figure 14. Expression of the CG3860 (GadFly Accession Number) Homologs in Mammalian Tissues

Figure 14A. Real-time PCR analysis of oxysterol binding protein-like 1A (Osbp11a) expression in wild type and control-diet mouse tissues

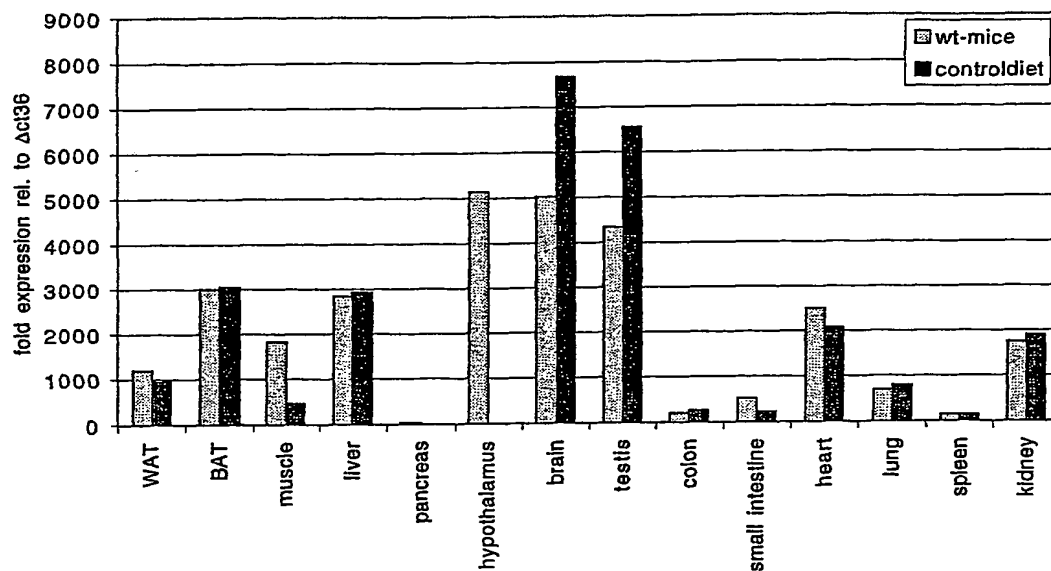


Figure 14B. Real-time PCR analysis of Osbp11a expression in different mouse models and in mice fed with a high fat diet compared to mice fed with a control diet

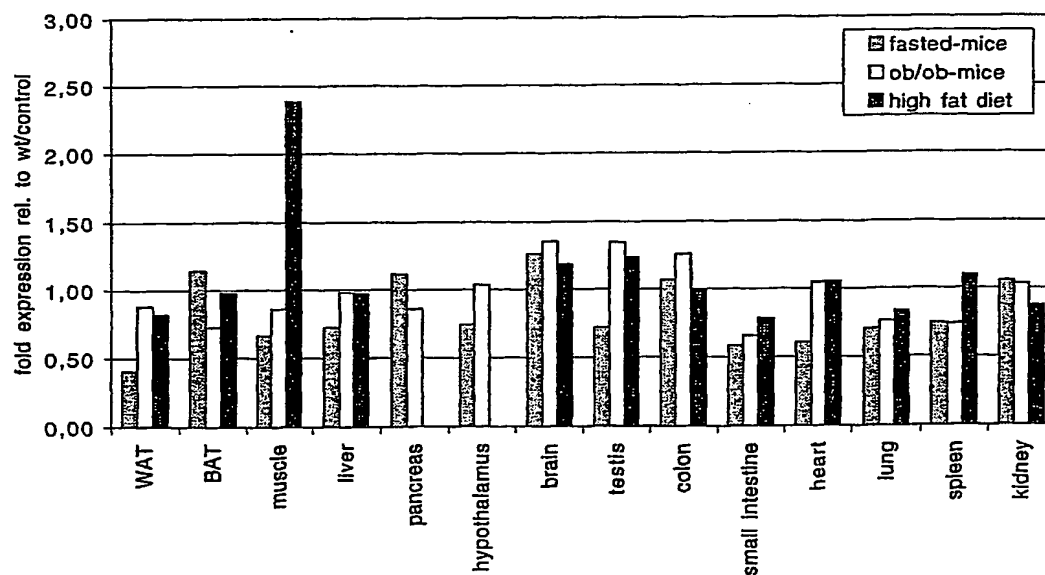


Figure 14C. Real-time PCR analysis of Osbpl1a expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes

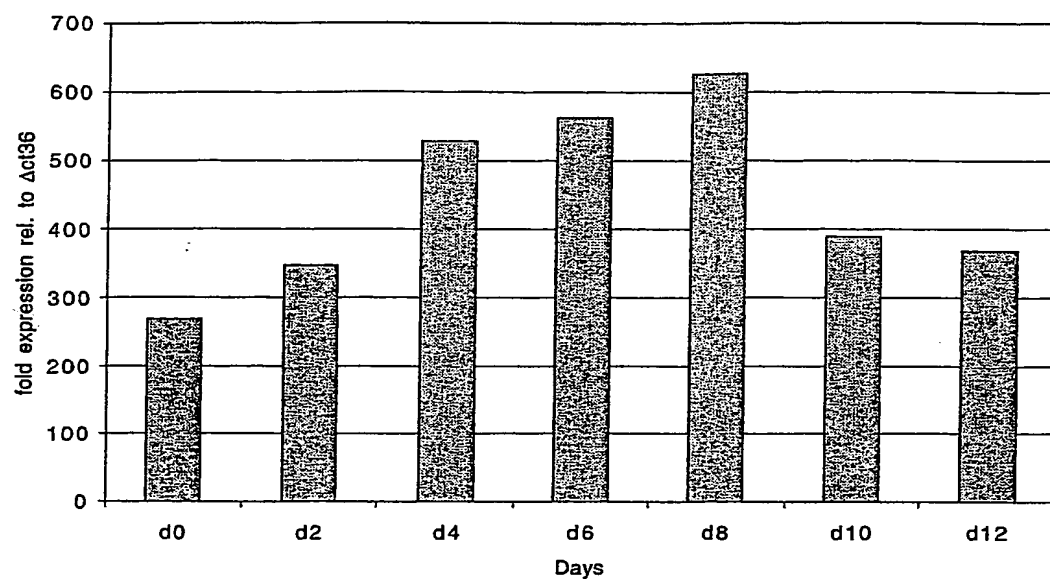
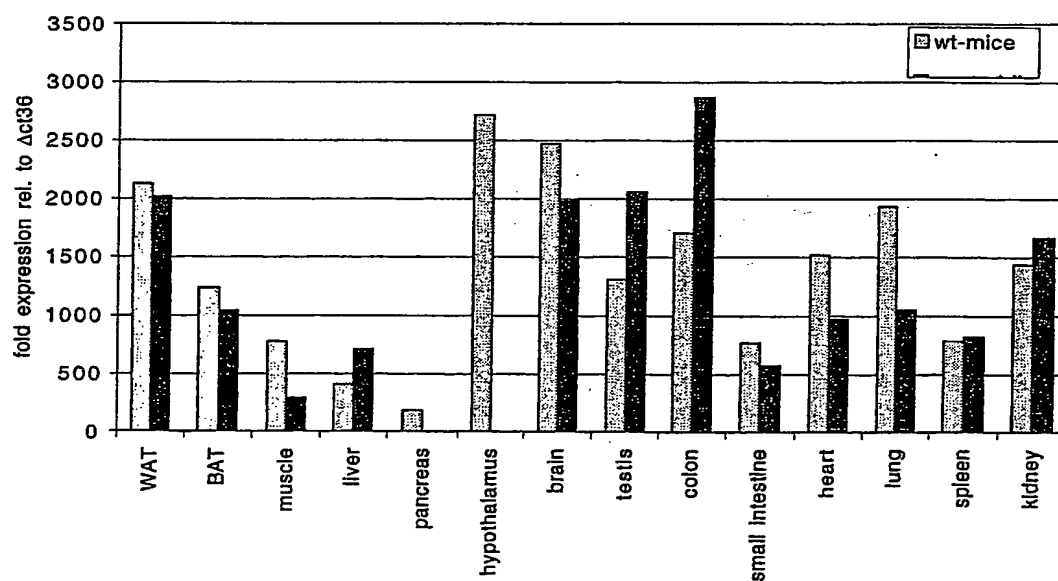


Figure 14D. Real-time PCR analysis of oxysterol binding protein-like 2 (Osbpl2) expression in wild type and control-diet mouse tissues



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Figure 14E. Real-time PCR analysis of *Osbp12* expression in different mouse models and in mice fed with a high fat diet compared to mice fed with a control diet

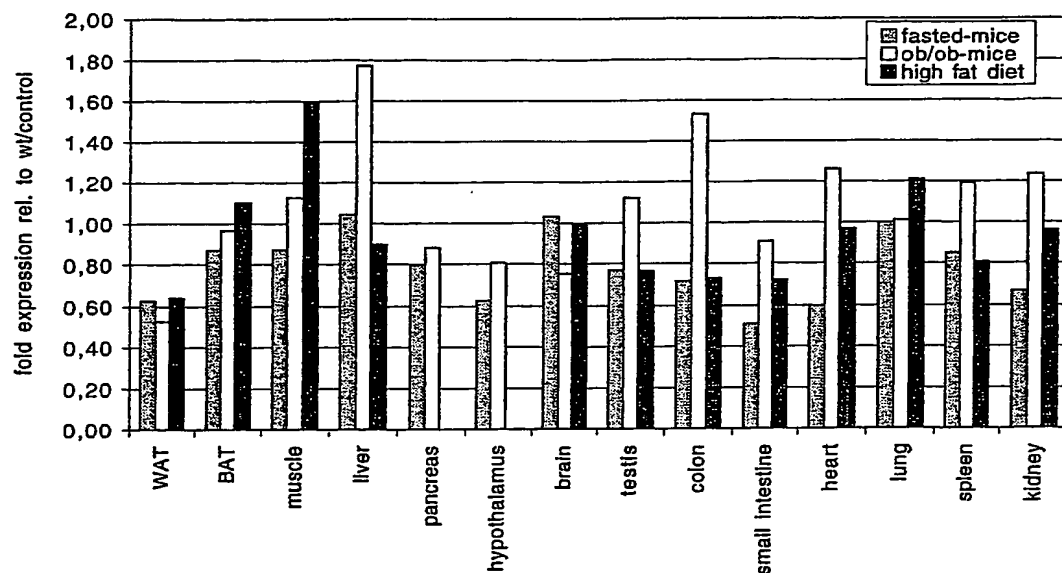
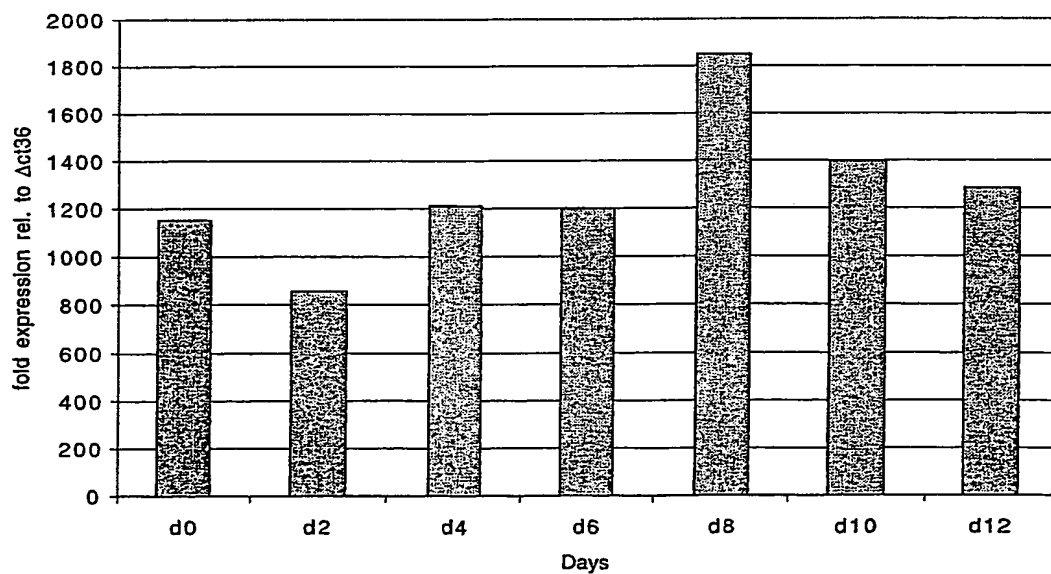


Figure 14F. Real-time PCR analysis of *Osbp12* expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes



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Figure 15. Expression of human CG3860 (GadFly Accession Number) homologs in mammalian (human) tissue.

Figure 15A. Microarray analysis of oxysterol binding protein-like 1A (OSBPL1A) expression in human abdominal derived primary adipocyte cells during the differentiation from preadipocytes to mature adipocytes

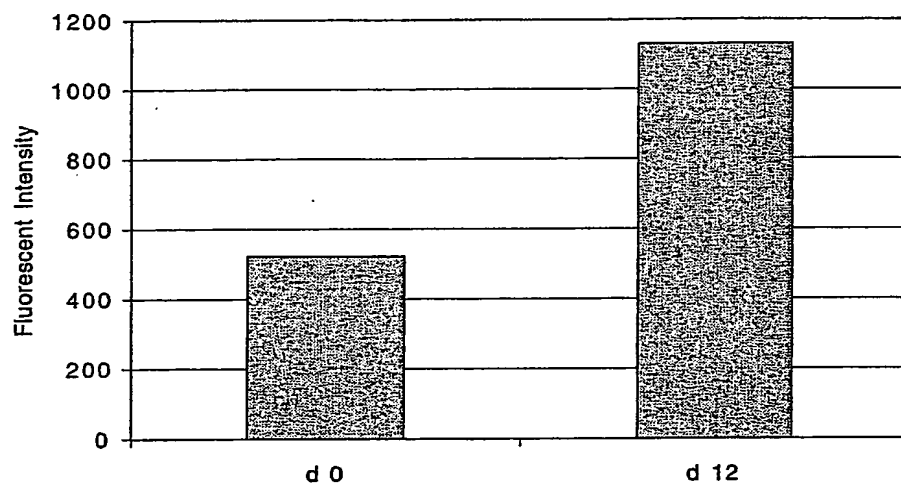
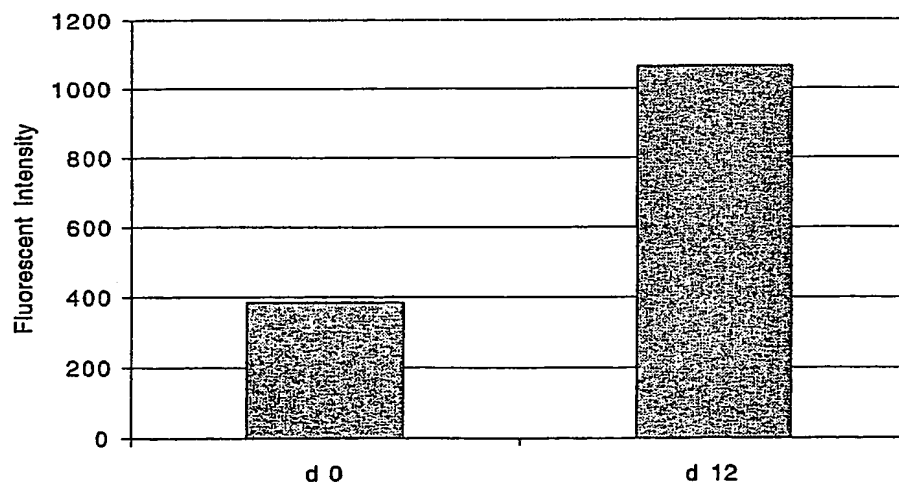
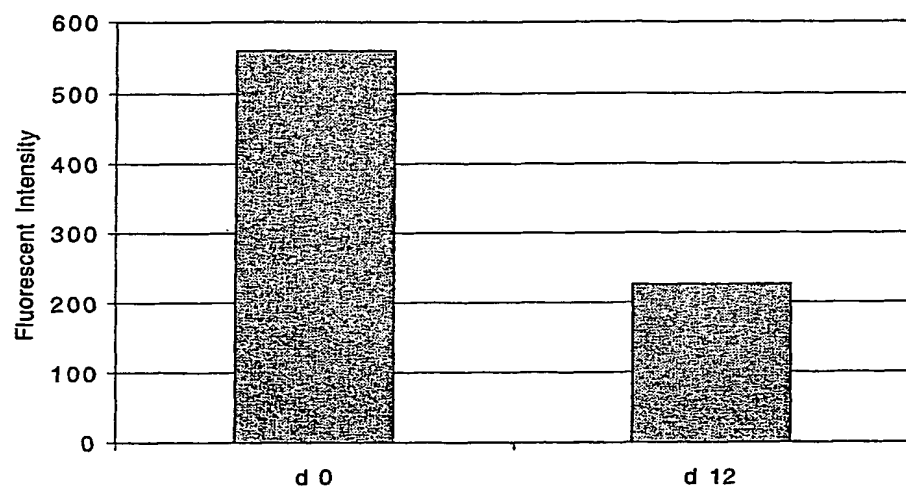


Figure 15B. Microarray analysis of oxysterol binding protein-like 1A (OSBPL1A) expression in a human adipocyte cell line during the differentiation from preadipocytes to mature adipocytes

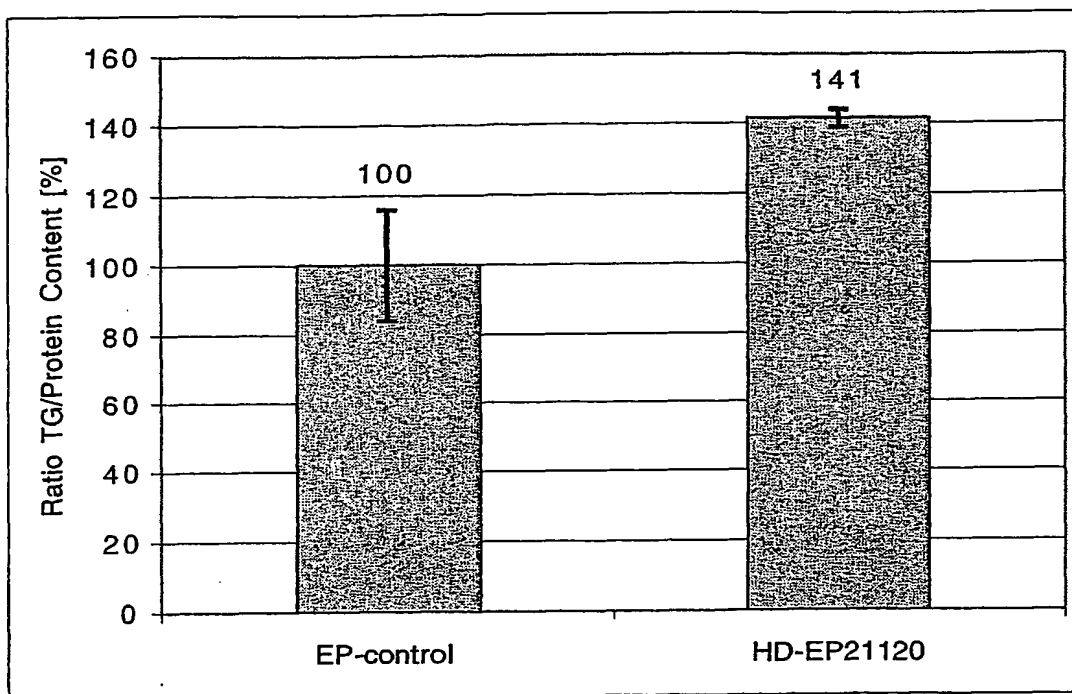


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Figure 15C. Microarray analysis of oxysterol binding protein-like 2 (OSBPL2) expression in a human adipocyte cell line during the differentiation from preadipocytes to mature adipocytes

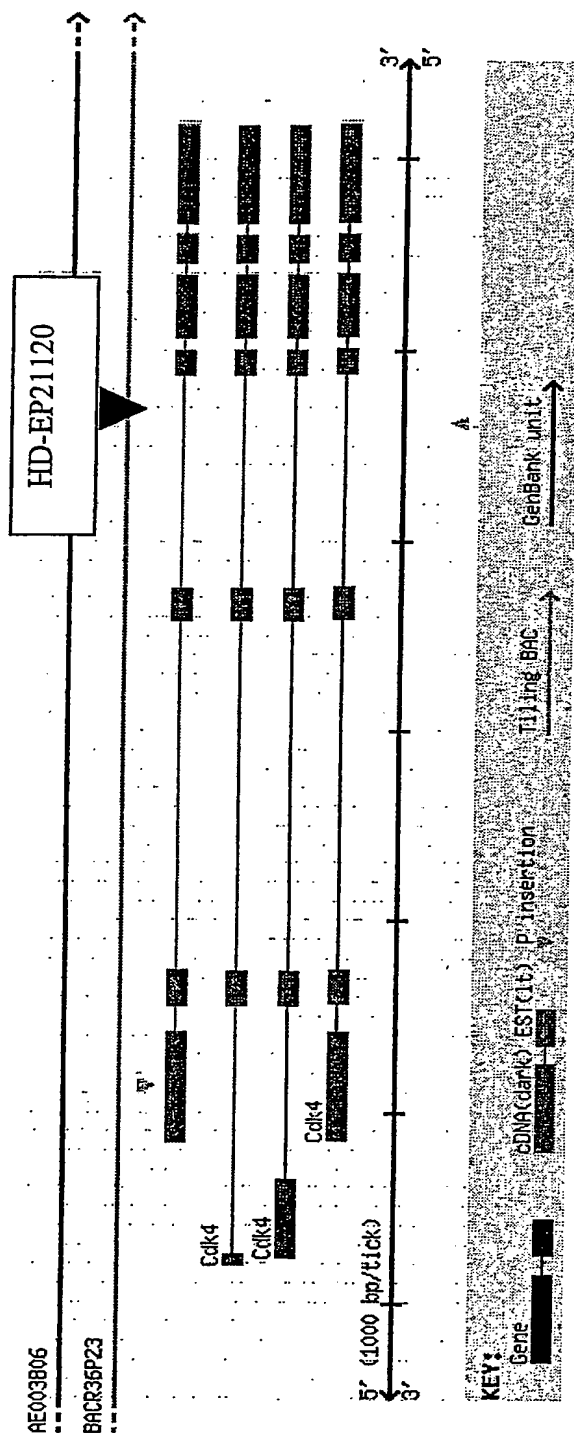


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Figure 16. Energy storage metabolite content of a *Drosophila Cdk4* mutant

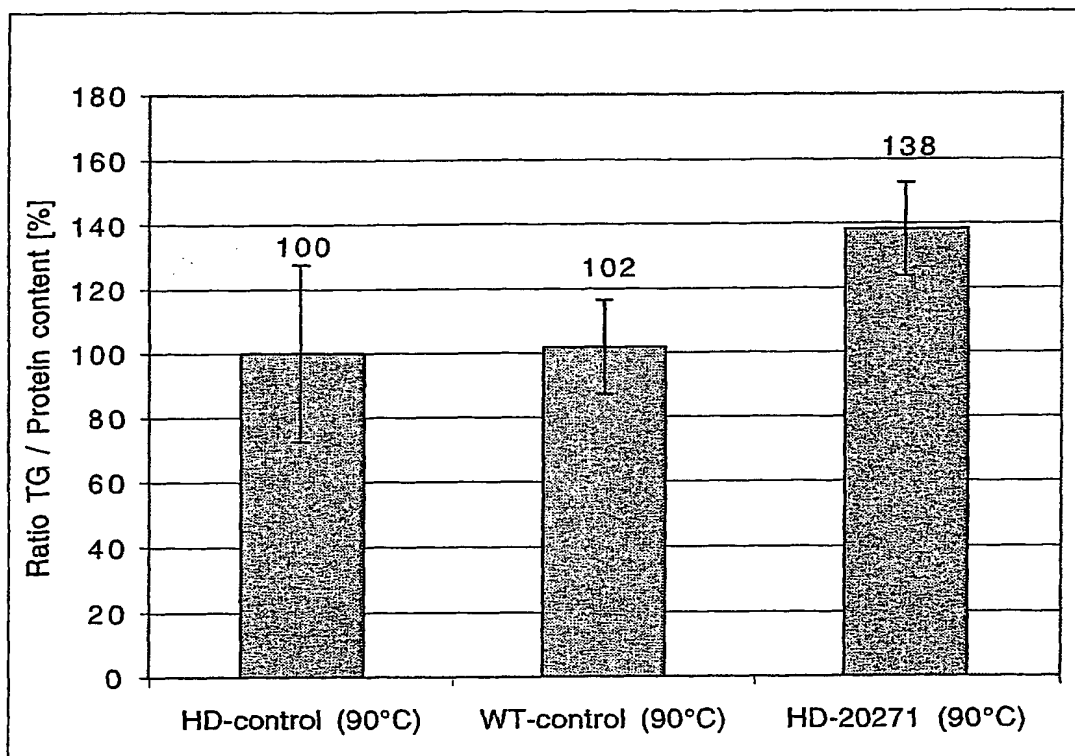
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Figure 17. Molecular organization of the *Cdk4* gene (GadFly Accession Number CG5072)



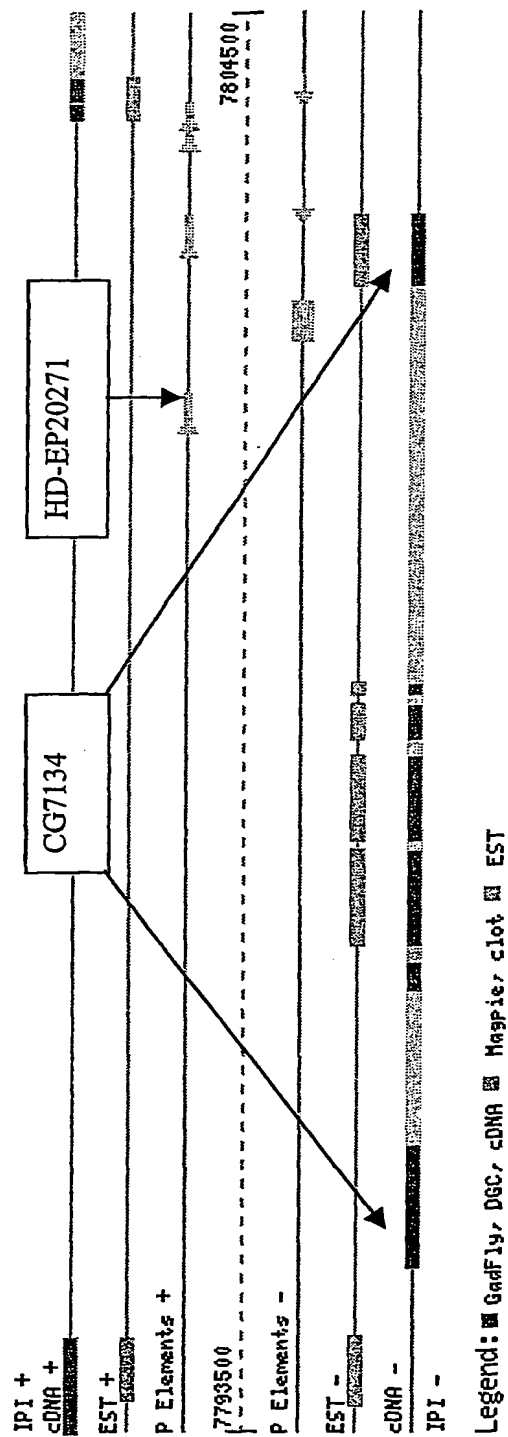
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Figure 18. Energy storage metabolite content of a *Drosophila* CG7134 (Gadfly Accession Number) mutant



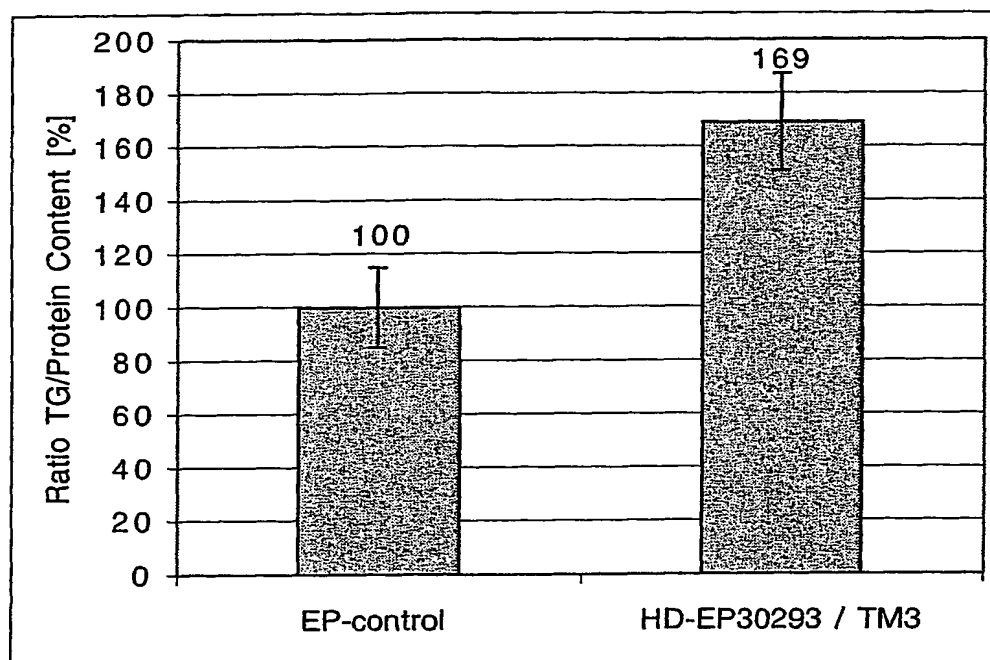
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Figure 19. Molecular organization of the CG7134 gene (GadFly Accession Number)



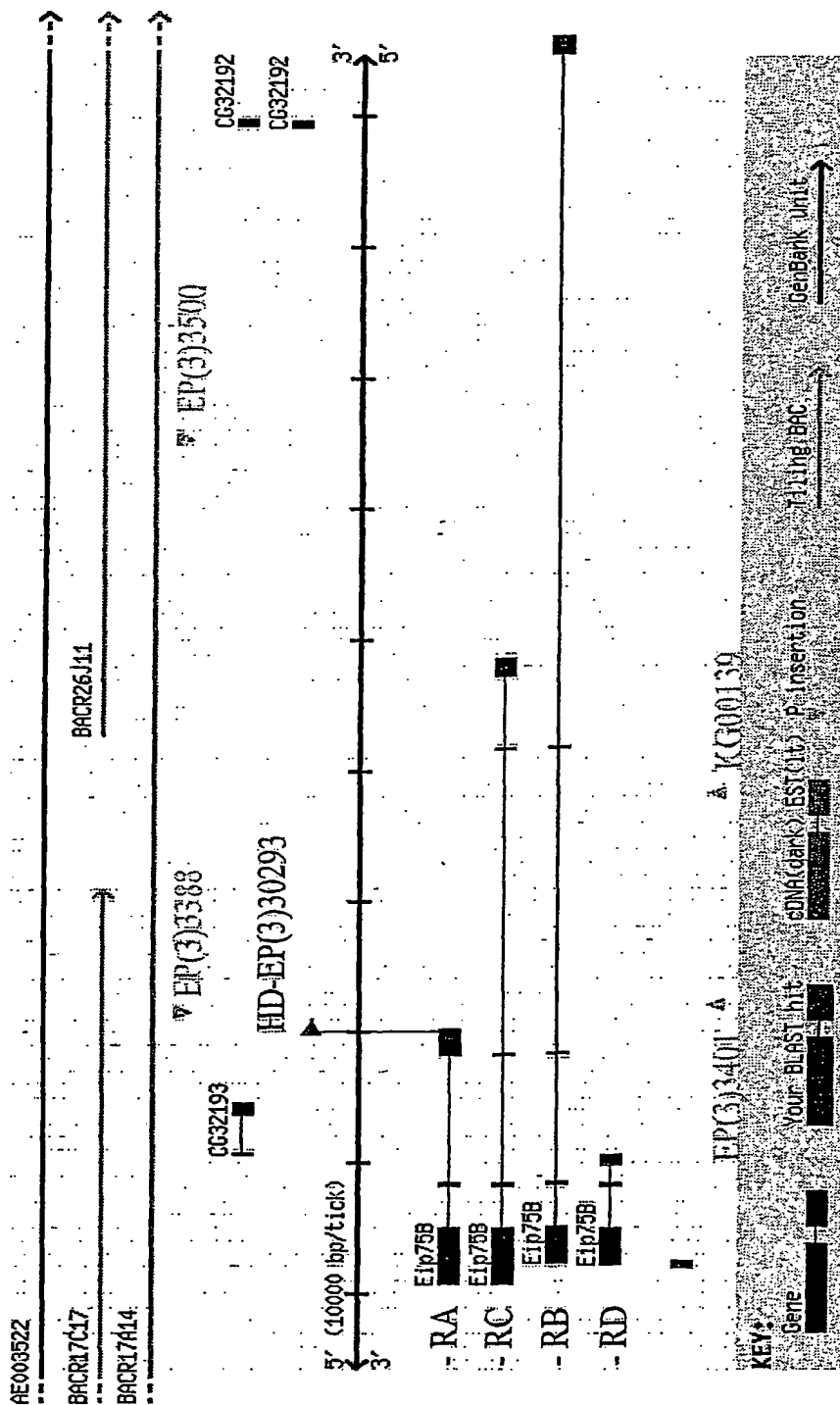
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Figure 20. Energy storage metabolite content of a *Drosophila Eip75B* mutant

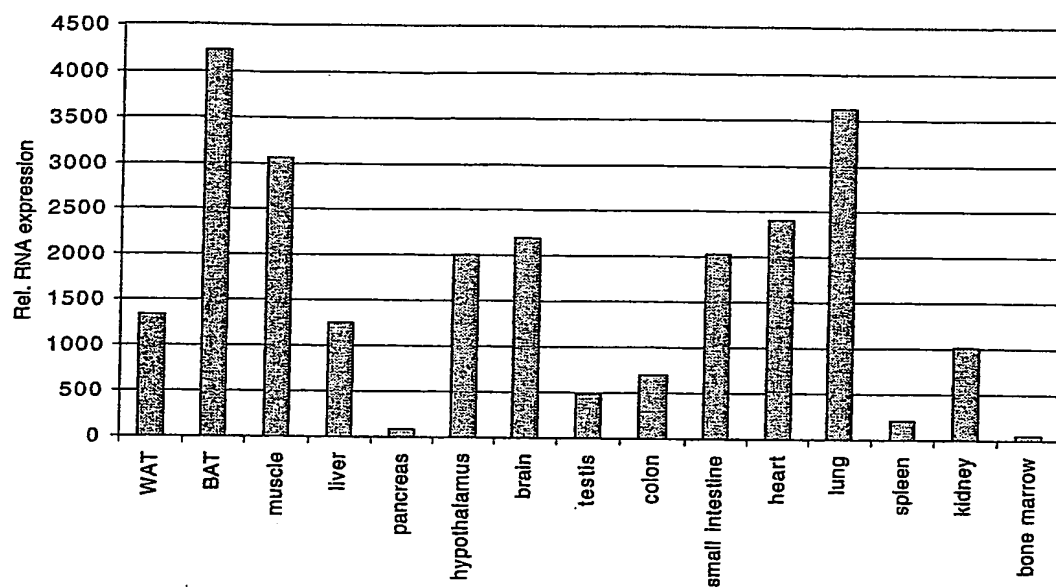
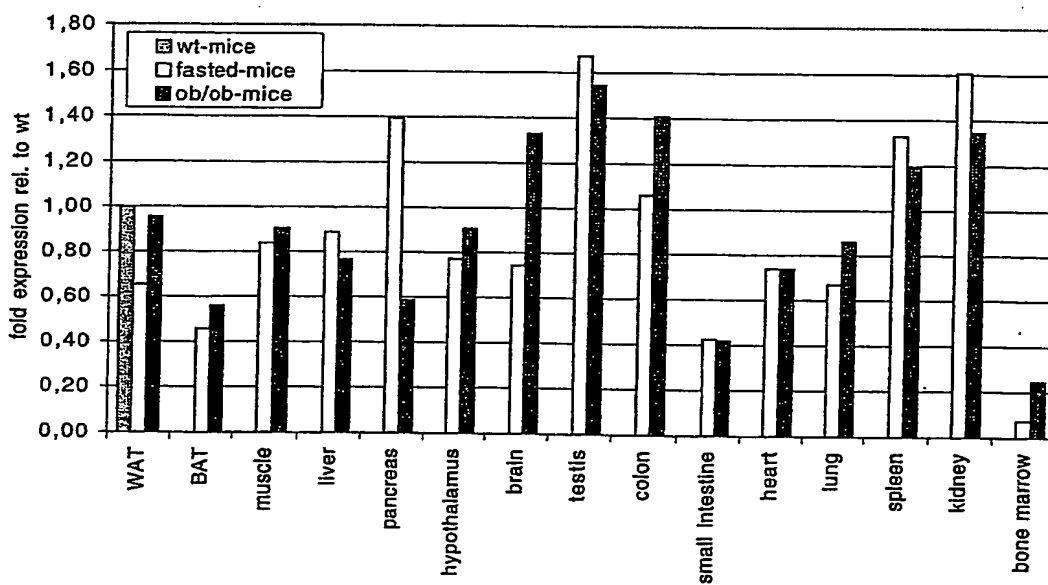


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Figure 21. Molecular organization of the *Eip75B* gene (GadFly Accession Number CG8127)



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Figure 22. Expression of tyrosine-protein kinases Nr1d1 and Nr1d2 in mammalian tissues**Figure 22A. Real-time PCR analysis of Nr1d1 expression in wildtype mouse tissues (ΔC_t (pancreas) = 36)****Figure 22B. Real-time PCR analysis of Nr1d1 expression in different mouse models**

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Figure 22C. Real-time PCR mediated analysis of Nr1d1 expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes

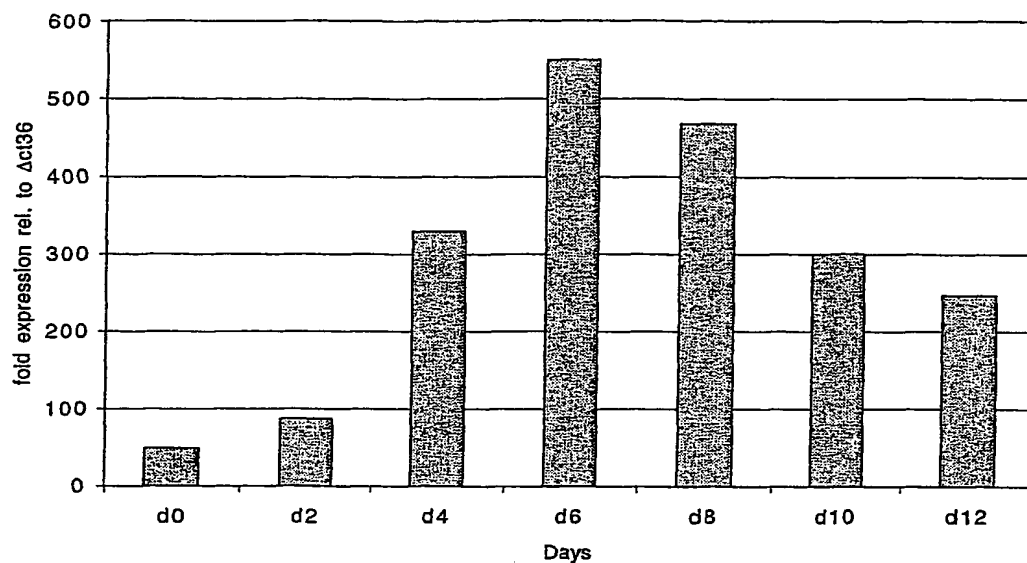
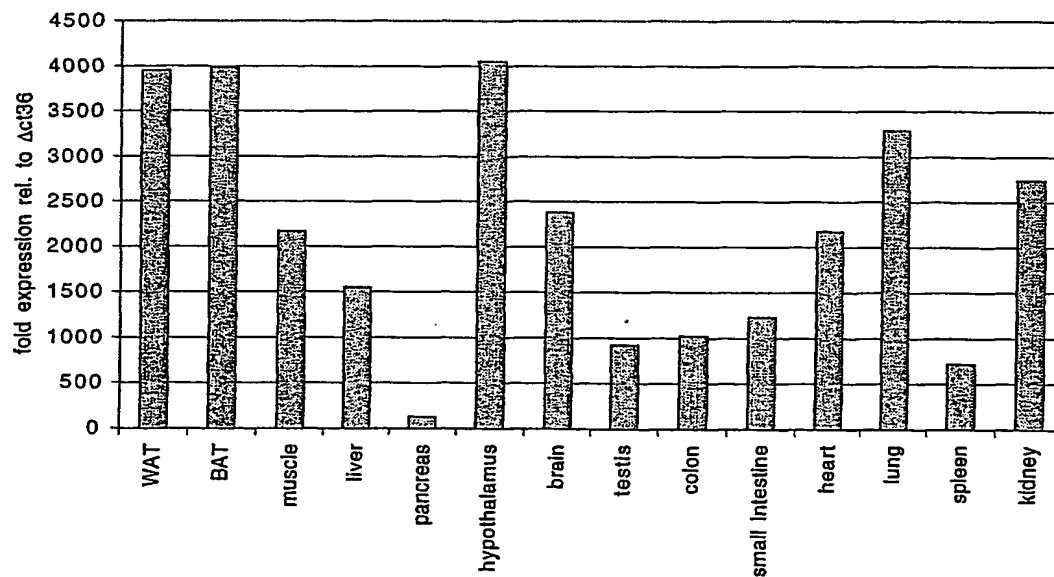
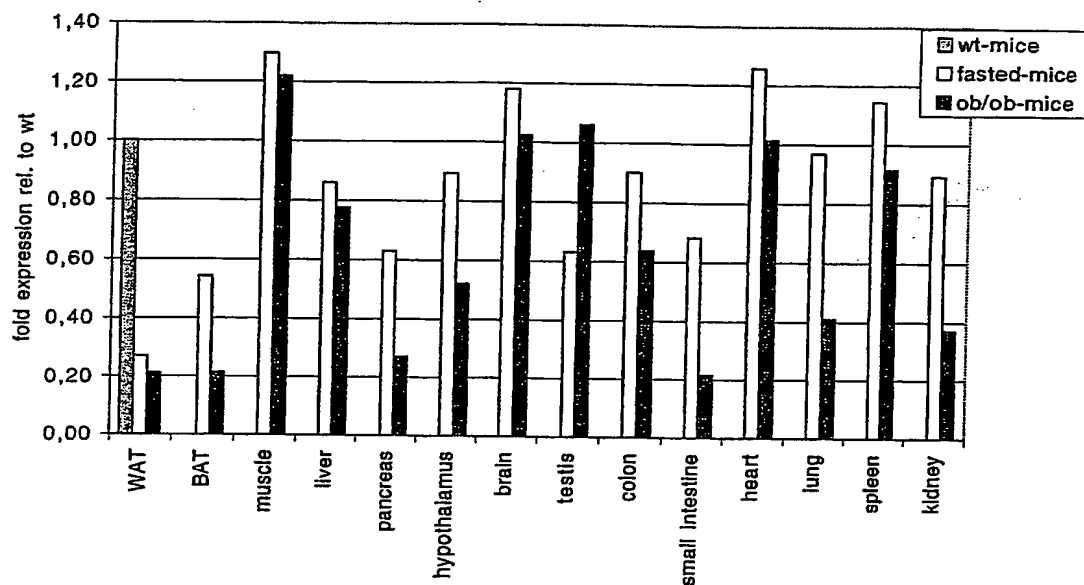
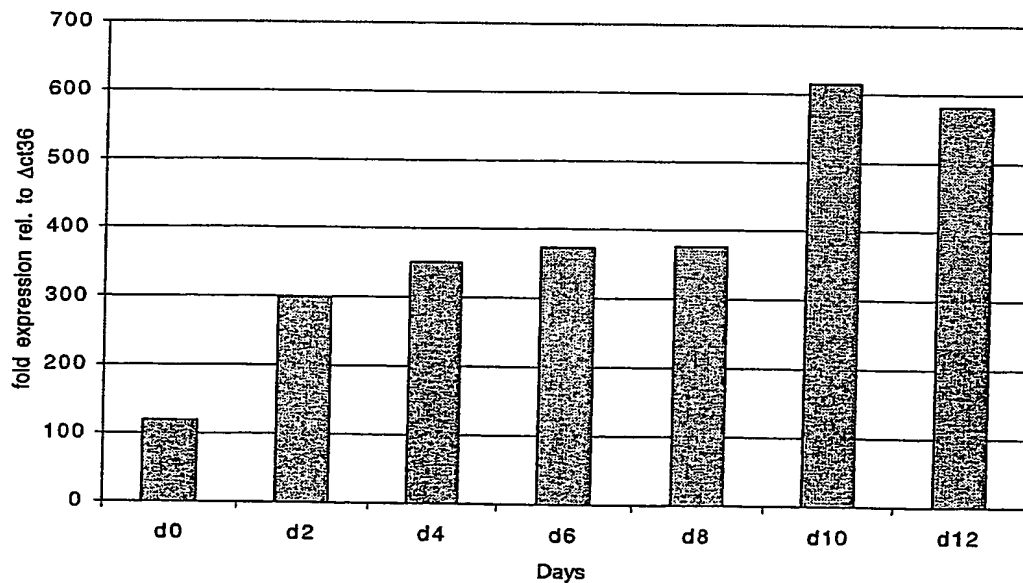


Figure 22D. Real-time PCR analysis of Nr1d2 expression in wildtype mouse tissues



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Figure 22E. Real-time PCR analysis of Nr1d2 expression in different mouse models**Figure 22F. Real-time PCR mediated analysis of Nr1d2 expression in 3T3-L1 cells differentiated from preadipocytes to mature adipocytes**

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Figure 23. Real-time PCR analysis of the expression of *Eip75B* homologs in different human tissues

Figure 23A. Real-time PCR analysis of NR1D1 expression in different human tissues

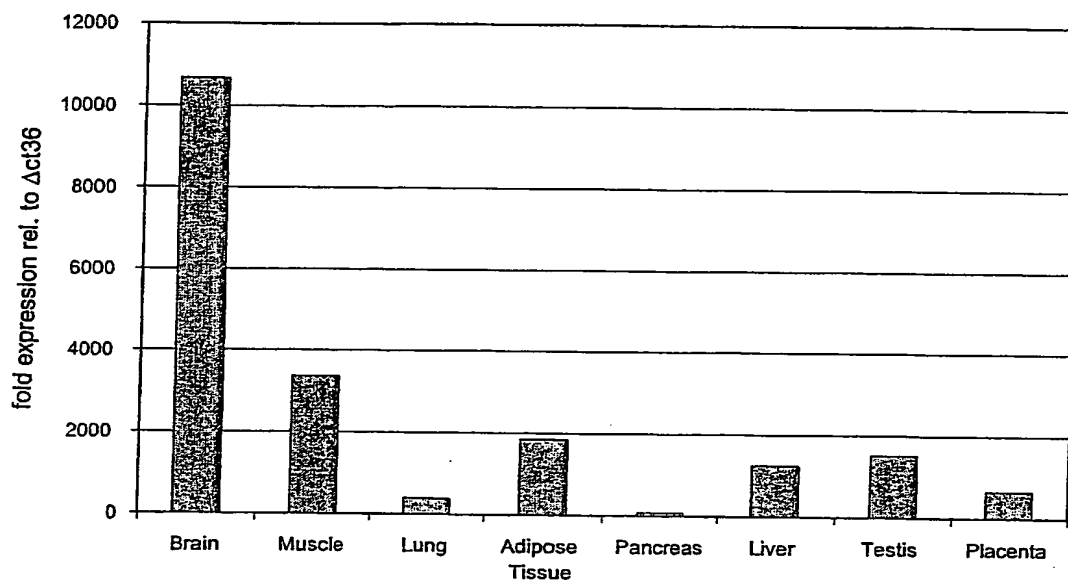
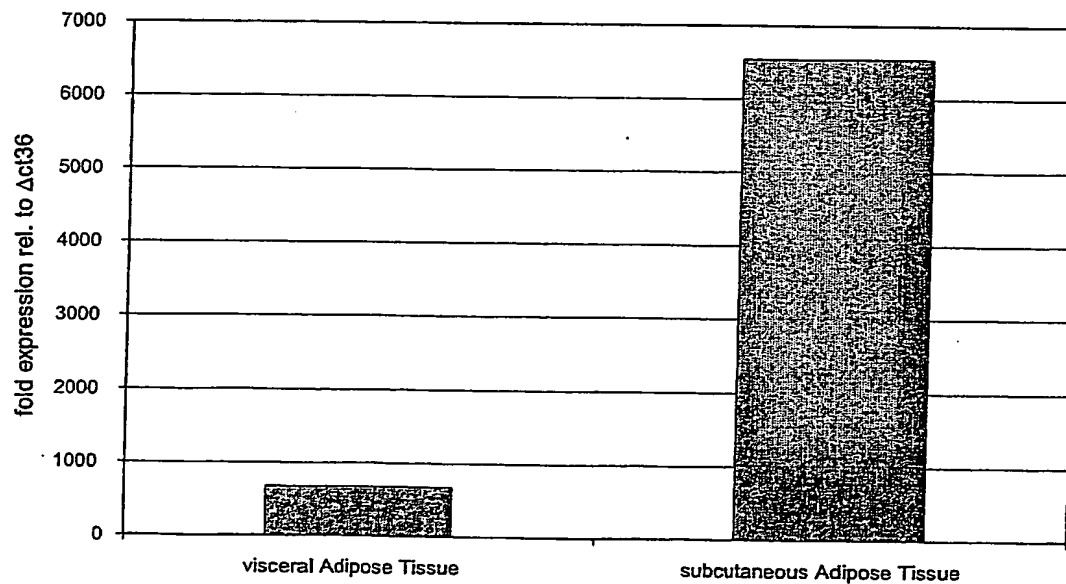


Figure 23B. Real-time PCR analysis of NR1D1 expression in different human adipose tissues



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Figure 23C. Real-time PCR analysis of NR1D1 expression in human abdominal derived primary adipocytes during preadipocyte differentiation

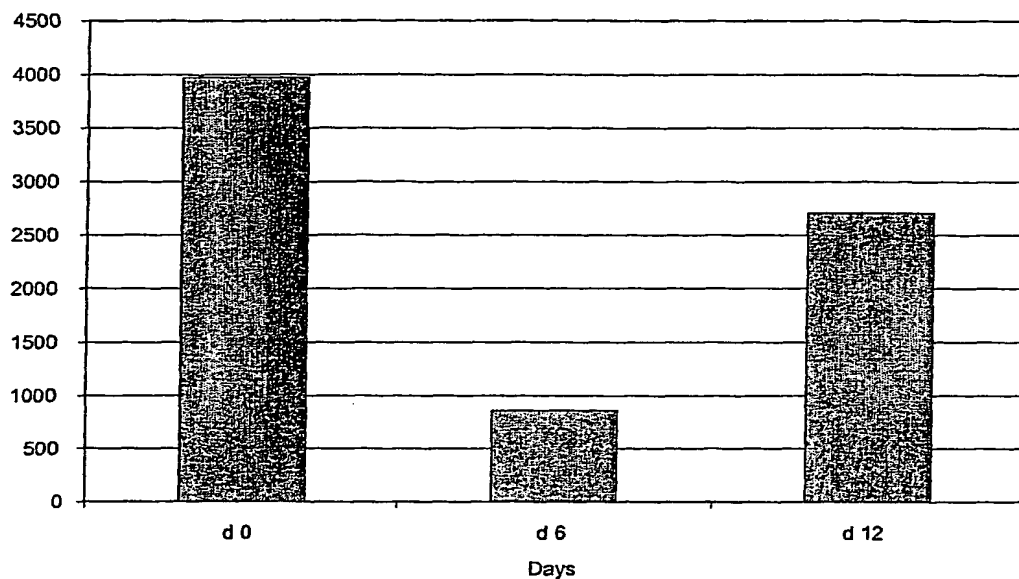
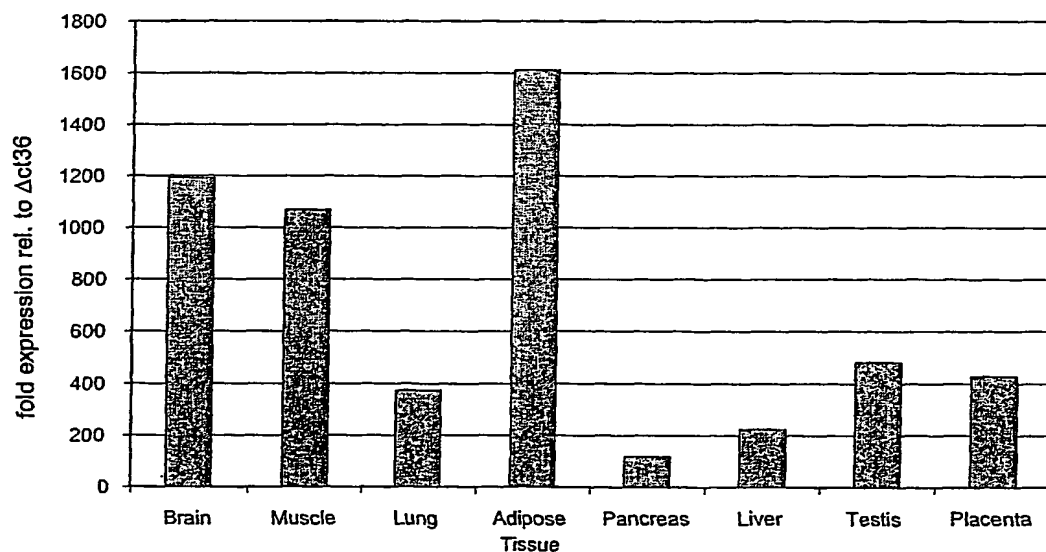


Figure 23D. Real-time PCR analysis of NR1D2 expression in different human tissues



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Figure 23E. Real-time PCR analysis of NR1D2 expression in different human adipose tissues

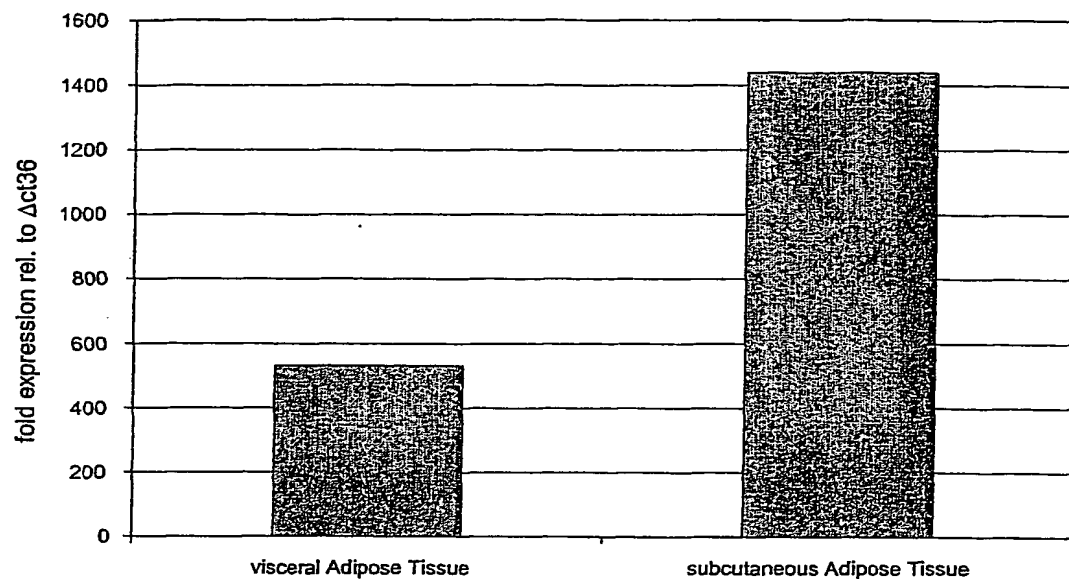
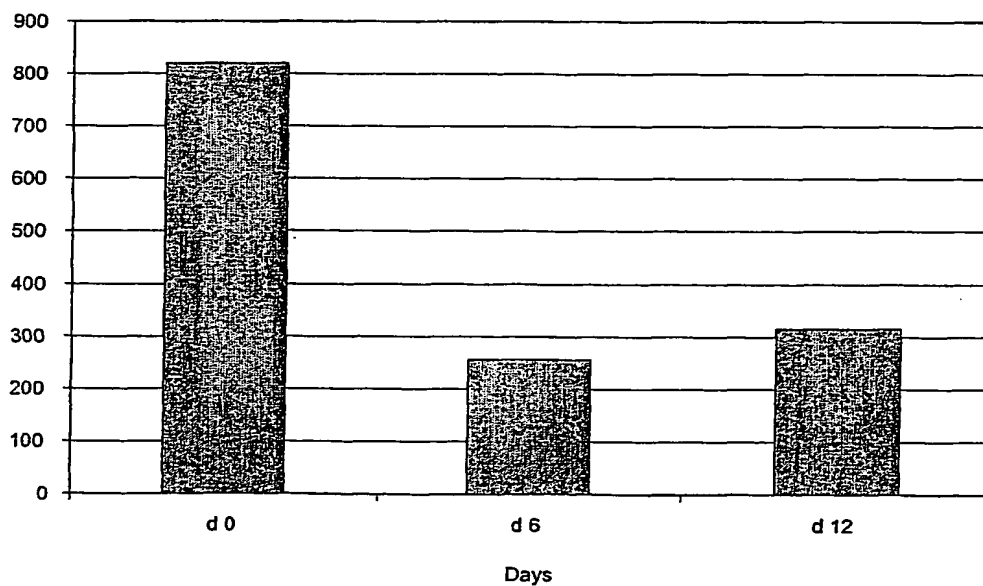


Figure 23F. Real-time PCR analysis of NR1D2 expression in human abdominal derived primary adipocytes during preadipocyte differentiation



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